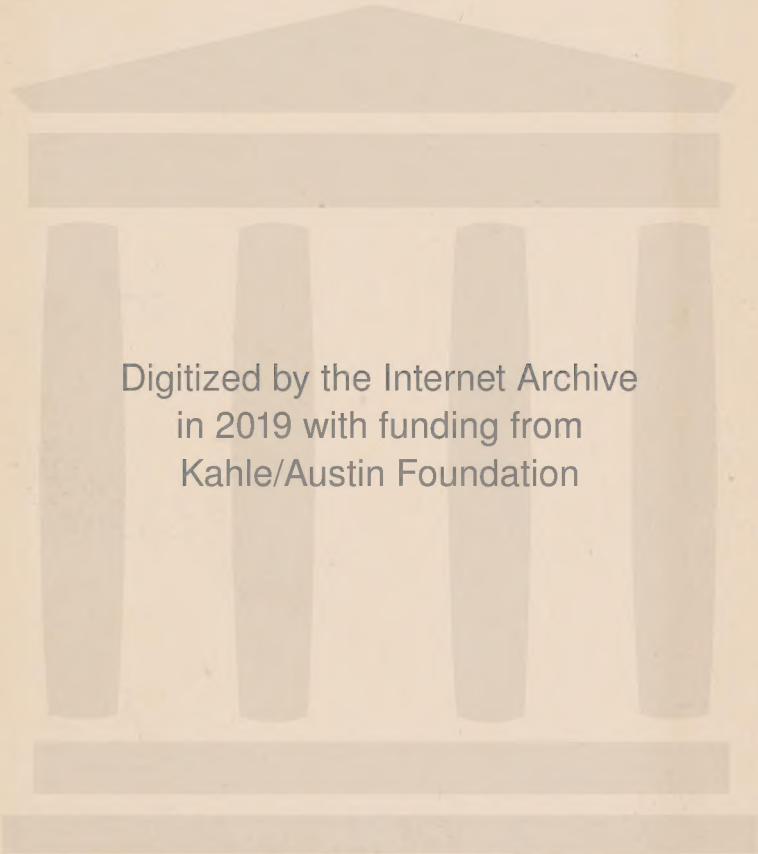
New Realism and Old Reality

D. LUTHER EVANS



New Realism and Old Reality

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NEW REALISM AND OLD REALITY

A Critical Introduction to the Philosophy of the New Realists

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To An Ideal Realist
Who Was A Real Idealist
— My Mother

PREFACE

PHILOSOPHIES, like human beings, are most interesting, and, at the same time, most baffling in their adolescent stage. The present adolescent in the philosophic household is new realism. Adolescent-like, it occupies that bewildering, but fascinating period when the polemical spirit of youth and the pacific spirit of age battle for control. Exhibiting on the one hand a temper of revolt, and on the other betraying a concern for the very things against which the rebellious attitude is directed, new realism is surely a philosophy in its "teens."

This internal discrepancy in recent realism makes the doctrine peculiarly interpretative of the American mind. For, like realistic theory, our nation itself is in a transitional stage suggestive of adolescence. The ruthless recusancy of its earlier years is making room for the conciliatory complacency characteristic of countries centuries old. No current philosophical standpoint reflects more clearly the conflict between the pragmatic and Platonic motives in American intellectual life than new realism.

To treat the new realist's doctrine as a reflection of the culture of America is not, however, the purpose of the present work. The aim of the book is to present a critical exposition, and not a sociological justification of new realism. The author trusts that the volume will help to fill the imperative need for a comprehensive discussion of the meaning and validity of realistic philosophy, as it is presented both at home and abroad. It is intended that the expositions and evaluations offered shall be intelligible to students with but little philosophical training. The books is frankly an introduction to, and not a substitute for, the studying of original realistic literature.

Because of a conviction that new realism has truly become a philosophical system the author has treated the standpoint as

standing for certain definite doctrines in ontology, cosmology, and so on. Such a procedure, however, is not to be taken as indicative of a complete acceptance among new realists of particular philosophical theories. Furthermore, it is not to be believed that the doctrines, examined later, have no place at all in the philosophies of non-realists. The nationality of the various realistic writers in recent philosophy is indicated in the classified bibliography in the appendix to the book.

Effort has been taken to give sufficient consideration to current doctrines, other than new realism, to make the volume serviceable in general courses on contemporary philosophy. The relations, which the theories of the positivists, idealists, pragmatists and critical realists bear to the position of the new realist, are discussed.

The author desires to express his thanks to Professors J. A. Leighton, G. H. Sabine, A. R. Chandler, A. E. Avey and R. D. Williams, all of the Ohio State University, for the generous aid they rendered him during the prosecution of this work. Valuable help was also received from Professor T. G. Duvall of the Ohio Wesleyan University, and from Professor O. L. Reiser of the University of Pittsburgh. The abundance of references and quotations clearly bespeaks the author's obligation to many for the sources of his material. The writer acknowledges an idealistic bias, but trusts that he is as fair in his treatment of realistic theory as one who has no claims to the title of new realist can hope to be.

D. L. E.

DELAWARE, OHIO,
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PART ONE

NEW REALISM AND SCIENCE

CHAPTER I

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It is foolish to expect agreement between philosophical theories when philosophers disagree as to what the motives and methods of philosophy should be. If there is ever to be a conclusion of philosophical controversy, there must be unanimity among philosophers regarding the character and criteria of philosophical inquiry. In short, the end of the strife between philosophical doctrines must occur first in the realm of logic. For, in the last analysis, philosophies are distinguished from each other on the basis of their logical theory. Ontological, cosmological, epistemological, theological, axiological and psychological differences are ultimately differences of logic. To declare concord between opposing philosophical or practical theories, while the logics underlying them are at war, is to announce peace in vain.

In no philosophical theory since the beginning of reflection has the fundamental importance of logic been emphasized more than in new realism. Both as a refuter and as a reformer the new realist is, above all things else, a logicist. When he defies or destroys, logic is his weapon; when he defines or defends, logic is his shield. The new realist believes that the traditional debates, regarding the nature of being, evolution, knowledge, deity, progress and personality, have been due to the failure of past philosophers to be truly logical. His criticism of traditional thinkers is not that they have neglected logic. They are declared guilty of a more grievous fault. According to the new realist, the philosophers of the past have misused logic. They have used it for purposes for which it is not intended. It is needful to

notice, therefore, that the new realist in using the term, logic, is employing an old name for some new ways of thinking.

Let us now consider how the traditionalist, in the opinion of the new realist, has interpreted the nature of logic.

I. THE TRADITIONAL STATUS OF LOGIC

In the judgment of the new realist, the traditionalist has falsely inverted the positions of logic and philosophy with respect to each other.

The Historical Position of Logic in the Field of Philosophy.— Instead of using logical theory as the foundation of philosophical doctrine, the thinker of the past has treated philosophy as the presupposition of logic. He has regarded logic as the conclusion and fruit of philosophy, whereas it should be considered philosophy's commencement and root. Logic, which should be the creator and condition of thought, becomes merely its critic and clarifier, and the discipline, which should be the determiner of truth, becomes simply a discloser of error. In recent phenomenalistic, pragmatic and idealistic philosophies, as in traditional theory, logic is treated as either the instrument or the interpretation of philosophical doctrines. Opposed to this notion of philosophy as prior to logic is the standpoint of the realistic thinkers of the present. The interest of German realists in phenomenology, of French realists in neo-Thomism, of English realists in mathematics, and of American realists in behaviorism betokens the realistic position that logic, as the fundamental science of all types of being, is prior to philosophical thought.

This twofold interpretation of the status of logic accounts for the fact that new realism, as polemic, must start with an examination of philosophical theories to arrive at logical conclusions, whereas new realism, as positive, commences with logic to attain later a body of philosophical concepts. Recent realistic logic can be investigated apart from ontological, cosmological, and epistemological questions; its simple notions are independent of concrete doctrines. The older logic, however, is dependent upon philosophical considerations and cannot be sep-

arated from them. An understanding of the nature of traditional logical theory requires an appreciation of the great philosophical movement of which it is the formal reflection. To indicate the general character of the logic-producing philosophy of the past is our next concern.

The Philosophical Background of Traditional Logic.—The aim of philosophy, historically, has been to demonstrate the oneness of reality, to show the world is a cosmos, a veritable "uni-verse." Recognizing experience as twofold, as having, on the one hand, an objective and impersonal character, and as possessing, on the other, a subjective and personal aspect, philosophers have been zealous to show that the real realm, back of experience, is not dualistic, but unified. Philosophical thinkers have ever been aware of two distinct roads to reality, the way of description and the way of appreciation; they have always known that the presentations of science differ from the deliverances of religion; but the recognition of the dissimilarity between induction and aspiration has never despoiled them of a constant conviction that experiment and esthetics are dealing with the very same world. The all-important ambition of the traditional philosopher has been to prove that, in spite of the "duplicity of experience," existences and meanings are two interpretations of being that is one. Stated in different words, to reconcile facts with values has been the historical thinker's preeminent purpose. As William James aptly asserts, "to show that the real is identical with the ideal may be set down as the mainspring of philosophic activity."[1] R. F. A. Hoernlé also points out that the philosopher cannot ignore the synthesis of fact and value, for "he is the guardian of the whole experience, and his task is to elicit from each of its forms the contribution which it has to make to a comprehensive theory of the universe."[2] J. A. Leighton considers the function of philosophy similarly. To quote his own words, "the aim of metaphysics is to attain a synthesis or synoptic interpretation of the meaning of ex-

[1] *The Will to Believe*, p. 264.
[2] *Studies in Contemporary Metaphysics*, p. 67.

perience in its wholeness," to strive "for a coherent and adequate conception of reality as a whole."[3]

Philosophy, because of this concern with life in its entirety and with experience in its widest expanse, has perennially found itself in an ambiguous position. It has been beset with the tremendous task of satisfying man's interest in the practical and the positive, and, at the same time, his craving for insight into the fundamental and final. The scientists have looked unto the philosopher for the ultimate grounds of scientific method; the champions of culture, as represented by poets, priests and prophets, have, on the other hand, expected him to justify mystical bases of knowledge, quite unlike the foundations of science. Because of this dilemmatic situation philosophical literature has been replete with controversial matter. As R. B. Perry puts it: "Philosophy is resorted to by two classes of persons. By some it is expected to afford rigorous theoretical solutions of special problems, such as 'consciousness,' 'space,' 'causality,' 'truth,' 'goodness.' By some it is expected to furnish the age, or any hungering soul, with a summary and estimate of the world for the purposes of life. . . . Philosophy is thus at once a recondite investigation, and a popular oracle; dispensing logical subtleties to the learned and homely wisdom to the vulgar."[4] Philosophy having been for ages assigned the difficult duty of harmonization and synthesis, the philosopher has learned full well that the way of the peacemaker, being necessarily that of the transgressor, is hard.

The Two Great Philosophies of the Past.—Traditionally, philosophy has presented theories of reconciliation between the "tough-" and the "tender-minded" aspects of human experience in the doctrines of two radically different systems. Each of these systems has sought to dissolve the discrepancy between existences and meanings, facts and values, by incorporating into its own standpoint the features of the opposing position. Unitary theories have been reached by trying, on the one hand, to make

[3] *Man and the Cosmos*, p. 10.
[4] *Present Philosophical Tendencies*, p. 25.

the subjective objective, and by seeking, on the other, to make the objective subjective. One system has arrived at a monistic conciliatory solution of the conflict by exalting existences and subordinating meaning. Values are treated as qualitatively the same as objective facts. The realities of the cultural life are explained as by-products; appearances, in the realm of the physical. The deliverances of art, literature and religion are interpreted in terms of physical science. Values become things. This is the solution of *naturalism*.

The other system represents the theory of a body of thinkers who have striven to meet the dilemma of dualistically motivated man by reducing all the features of the world to meaning. The cultural phase of life is regarded as a representation of the true nature of reality in its entirety or in its parts. Priority is given to meanings, and existences are brought low. The objects of empirical science lose their factual independence and are interpreted in terms of mind. Things become by-products, appearances, in a universe of consciousness and a world of values. This is the solution of the philosophical problem which *idealism* presents. Like the naturalistic thinker, the idealist wants to reduce the plurality of the world to oneness.

Imposing as is the historical belief that the many in the world are fundamentally one, the exponent of new realism thinks it an illegitimate conviction. It is indicative of the failure of past thinkers to pay heed to logic at the commencement of their reflections. The traditional philosophies are suggestive of the fact that, historically, thinkers have been more influenced by the dictates of temperament than by the desire for truth. This domination of heart, rather than head, has produced philosophical theories impaired by serious logical fallacies. What these grievous errors are is the question we are now to consider.

II. THE FALLACIES OF TRADITIONAL THOUGHT

THE most succinct statement of the defects, which the new realist finds in historical philosophy, is to be found in the introductory chapter of *The New Realism*. The book, anticipated in

1910 in discussions in *The Journal of Philosophy, Psychology and Scientific Methods*, was published in 1912. It is the cooperative work of six American philosophers: E. B. Holt, W. T. Marvin, W. P. Montague, R. B. Perry, W. B. Pitkin, and E. G. Spaulding. The volume of *Essays, Philosophical and Psychological*, published in honor of William James in 1908, contained several articles of definite realistic import, but the joint work of the six new realists, named above, has clear claim to be called the first presentation in America of new realism as a philosophical system. The defects of traditional theory are defined in *The New Realism* by R. B. Perry, who elaborates upon them in his own book, *Present Philosophical Tendencies*, also published in 1912. The weaknesses pointed out, however, are imperfections for the discovery of which the new realist can hardly profess originality. They are fallacies which have been recognized and denounced throughout the history of thought. But, if they are errors which all philosophies have contemned, it must be acknowledged that, of all systems, new realism has been the most constant, clear and conscientious in their denunciation.

Among the errors of philosophy throughout its history three are outstanding in the opinion of the new realist. They are: *the speculative dogma; the error of pseudo-simplicity;* and *the fallacy of exclusive particularity*. Let us now notice in detail these fallacies so prominent in bygone philosophies. Subsidiary errors, which arise as corollaries to the three major fallacies, will also be noted and defined.

The Speculative Dogma.—This fallacy, also known as *the speculative ideal*, is the belief that there is some reality which alone is ultimate and of which all things are manifestations and appearances. To quote from *The New Realism*, it is the questionable "assumption for philosophical purposes that there is an all-sufficient, all-general principle, a single fundamental proposition that adequately determines or explains everything" (pp. 16, 17). J. E. Boodin describes the speculative dogma when he criticizes philosophers for believing "that only like can make a difference to like, or that cause and effect must be identical."

He asserts that this axiom has been assumed by both idealism and materialism, an assumption on the part of these philosophies which shows that they are both indiscriminating and dogmatic. "Idealism, starting with meaning stuff, tries to explain the whole universe in terms of this. Materialism, starting with mechanical stuff—stuff indifferent to meaning and value—must be consistent, or as consistent as it can, in expressing the universe in terms of this. Both buy simplicity at the expense of facts."[5] W. H. Sheldon is another philosopher, who, like Boodin, is not a new realist, but nevertheless calls attention to the evil of speculative procedure. In his work on the *Strife of Systems and Productive Duality* (p. 417), Sheldon regards speculation of the singularistic type as the perennial philosophical disease in which a system analyzes its counter-category down into relations toward, or of its own category. Speculative practice is the habit of mind which William James dramatically describes as "the ladder of faith."[6] It is the propensity of thought which Socrates, in the *Philebus* of Plato, defines as the error of neglecting intermediate steps in passing from finitude to infinity.

Among new realists themselves R. B. Perry and Bertrand Russell have been the most insistent in denouncing the fallacy of the speculative dogma. The former depicts it as the method of thinking in which "philosophy is only an attempt to find the value of x, where x is that something of which everything is a case, and in terms of which every aspect and alteration of everything must be expressed."[7] According to Russell, the error is one which has historically marked metaphysics, because historical metaphysical theory has constructed world doctrines by *a priori* reasoning, which has had little appeal to experience, rather than by an analytical logic which discovers what reality is and not what it, in imagination, may be. "The desire to know philosophical truth," observes Russell, "is very rare in its purity, it is not often found even among philosophers. It is obscured some-

[5] *Truth and Reality*, p. 254.
[6] *A Pluralistic Universe*, pp. 328, 329.
[7] *Present Philosophical Tendencies*, p. 65.

times—particularly after long periods of fruitless search—by the desire to think we know. Some plausible opinion presents itself, and by turning our attention away from objections to it, we may obtain the comfort of believing it, although, if we had resisted the wish for comfort, we should have come to see that the opinion was false."[8]

The speculative dogma has led historically to the ontological problem of stuff or substance. It has resulted in the age-long search for knowledge regarding the material out of which reality is made. The traditional attempts to explain the world ultimately as solely psychical or solely physical are effects of the belief that the speculative ideal is valid. E. G. Spaulding describes the error as one which promotes the quest for a "numerically single underlying substance or substratumlike core."[9] The same author elaborates the fallacy as follows: "The whole [in philosophy] is given *higher status*, and the part is regarded as deserving and winning place *only in the whole*. With the whole thus 'made' *reality*, the part is, also, frequently 'made' *appearance*, or, when the analysis is regarded as serving our practical needs, the part is allowed to be only an *artefact*. Thus it is that in religion and theology the whole is often identified with God, while all else is allowed to be but manifestation."[10]

A subsidiary error to which the speculative dogma has led is that of *verbal suggestion*. This error is "the use of words which shall somehow convey a sense of finality, or of limitless and exhaustive application, where no specific object or exact concept possessing such character is offered for inspection."[11] This error, also called that of *equivocation*, is especially dangerous, because it not only conceals by verbiage fundamental fallacies, but also endows these fallacies with a supernatural connotation which seems to lift them above the realm of human investigation. The errors of the speculative dogma and verbal suggestion

[8] *Scientific Method in Philosophy*, p. 4.
[9] *The New Rationalism*, p. 353.
[10] *ibid.*, p. 125.
[11] *The New Realism*, p. 19.

both arise out of the demands of the religious consciousness for a universal ground of optimistic faith. In their commission the alogical, romantic, mystical temper of mind dominates the metaphysician. They possess an emotional or sentimental significance but they are, nevertheless, serious impediments in the road to facts, and philosophy, the new realist urges, must play true to facts. As Bertrand Russell asserts: "The hope of satisfaction to our human desires—the hope of demonstrating that the world has this or that desirable ethical characteristic—is not one which, so far as I can see, philosophy can do anything whatever to satisfy."[12] Let us pass on to a consideration of the second grave fallacy, which the new realist denounces in traditional thought.

The Error of Pseudo-Simplicity.—This fallacy appears with the disposition to assume that to be simple which is only familiar. Mind and body, consciousness and matter, are treated as simples, whereas they are decidedly complex. They are designated as simple, not after much analysis, but after little or none. Again, the ascription of simplicity results because the variety of characters in the object analyzed is overlooked in attending to their undifferentiated unity in the consciousness of the analyzing subject. Unity of knowledge is assumed to be indicative of unity in the thing known. The new realist finds justification for condemning the notion of simplicity in the fact that logically it leads to a skepticism so radical that it becomes self-refuting. R. B. Perry brings out this point in his criticism of the anti-intellectualistic treatment of activity in Henri Bergson's theory of pure duration: "No, one must not *attempt* to define it [activity]; it is essentially a something-not-yet-defined. In short, it is nescience presented in the rôle of a revelation of reality. To lapse from knowledge into nescience is always possible—there is no law of God or man forbidding it. But to offer nescience as evidence of the nature of anything, to rank nescience above knowledge for *cognitive* purposes, is to obtain immunity from

[12] *Scientific Method in Philosophy*, p. 29.

criticism only by forfeiting the right to a respectful hearing."[13] If analysis falsifies the facts, as one subject to the error of pseudo-simplicity believes, then, to use an assertion from *The New Realism* (p. 13), "the more pains we take to know, the less real is the object of our knowledge; a proposition which is never asserted without being contradicted, since it expresses the final critical analysis of the thinker who asserts it."

An error, associated with the error of pseudo-simplicity, is that of *indefinite potentiality*. The former fallacy represents inadequate analysis of substance; the latter, inadequate analysis of causation. As in the case of the error of pseudo-simplicity, in which unity in the subject is projected into the object, so in the case of the fallacy of indefinite potentiality the character of mind as dynamic and active is considered significant of the nature of reality as a whole. The old fallacy of animism is committed. The substance is believed to be an indefinite and indeterminate potentiality upon which the actualization of all its manifestations, all its relations and attributes, is dependent. To account for natural changes, nature is made identical with energy, and the essence of energy, on the basis of analogy, is considered psychical. The error is prominent in our descriptions of the self as active, as, for instance, in notions of unanalyzable creative powers in mind, apperceptive faculties, and dominations of will. Such features of reality are considered self-evident, and any attempt to analyze or prove them would be an absurd and presumptuous procedure. This belief in the uniqueness of creative entities is, in the opinion of the new realist, unwarranted superstition. To the realistic thinker, forces of activity can be analyzed, as we shall have occasion to observe later, logically, physically and psychologically. The exponent of new realism maintains that dynamic characters are deemed simple only because analysis of them has not been thorough.

From the realistic standpoint a philosophical doctrine like Henri Bergson's theory of freedom is a glaring instance of the

[13] *Journal of Philosophy*, Vol. VIII, p. 720.

fallacy of indefinite potentiality. To Bergson, as he expounds the conception in Chapter III of *Time and Free Will*, the idea of voluntary activity, given in consciousness, represents absolute reality—reality which eludes the grasp of laws, reality which analyzing intellect can only symbolically represent. For this interpreter of the real, dynamism is more simple than mechanism, and the idea of spontaneity simpler than the idea of inertia. Each of us, according to Bergson, has an immediate knowledge of his free spontaneity. This knowledge is revealed to the fundamental self, which cannot be investigated by any intellectualistic or empirical procedure. The self, which gives rise to free decision, is the dynamic, heterogeneous, living, indescribable person. R. B. Perry criticizes this dynamistic and vitalistic standpoint of Bergson in a way to indicate clearly the nature of the errors of pseudo-simplicity and indefinite potentiality: "Now there are two ways of unifying experience. One way is to *carry analysis through* and discover the connections of the parts and the articulate structure of the whole. The other is to reverse the operation, to *carry it back* to its vanishing point—to the bare word or the bare feeling of attention. In the second case the experience is simplified—by the disappearing of the object. A perfect simplicity, an ineffable unity, is attained at the point where the object drops out altogether. But then knowledge has ceased; and the experience, what there is of it, is of no cognitive significance whatsoever. . . . Such unification may be obtained by falling asleep, as by auto-hypnosis. . . . In the twilight all things are gray; in ignorance all things are simple."[14] We are now ready to examine the third major fallacy, which the new realist deplores in the traditional philosophies.

The Fallacy of Exclusive Particularity.—This error, so lamentable in past philosophy, according to the new realist, is the unwarranted belief that a particular term belongs to only one system of terms, and that it can function in only one relationship. It is the assumption that the data of objective science

[14] *ibid.*, Vol. VIII, p. 679.

and introspective science are numerically different, and that the subject matter of physics is in another sphere of reality from that of psychology. The possibility that the same term may be both physical and mental is lost sight of. Because of this error philosophy has been a history of theories to explain how features of being so different as mind and matter, values and facts, ever are conjoined.

The tremendous difficulty of bridging the gap between the world of physics and the world of psychology led philosophers into another error, similar to that of exclusive particularity, namely, the error of *definition by initial predication.* This latter fallacy represents the disposition to assume that, since a term can enter into but one manifold, terms which seem to be different nevertheless do belong somehow or other to the same complex. Thus the upholder of naturalism asserts that all terms must be located in a system of bodily events, while the idealist declares all terms belong to the system of experience. Bertrand Russell calls this particular propensity of thought "the system-maker's vanity." In his *Scientific Method in Philosophy* (p. 237) he deprecates the error by sardonically pointing out that "the desire for unadulterated truth is often obscured, in professional philosophers, by the love of system: the one little fact which will not come inside the philosopher's edifice has to be pushed and tortured until it seems to consent."

The error of initial predication does not consist in the fact that one postulate is used as a starting place for interpretation, but in the fact that the initial position becomes definitive and final. Naturalism and idealism appear definitive and final only because their respective defenders are influenced by another unsound tendency—the fallacy of *illicit importance.* As it is defined in *The New Realism* (p. 20), this error is the mistake of assuming that "because a proposition is self-evident or unchangeable, therefore it is important." The materialist is logically sound in asserting that objects are real, and the idealist is justified by logic in affirming that subjects are real, but when the materialist declares that all reals are objects and the idealist

insists that all reals are subjects, they are both guilty of false conversion. The new realist, in criticizing the traditionalist for assuming that because a proposition is true it has universal significance, is bringing to light the falsity of the ancient notion that conceivability is the test of reality.

The three main fallacies of traditional thought and their corollary errors are regarded by the new realist as one supreme fallacy, that of espousing an erroneous logic. We shall have much to say later regarding the logic of traditionalism, but it may be well here and now to indicate briefly what the main features of traditional logical theory are.

III. THE LOGIC OF TRADITIONAL REFLECTION

THE traditionalist's logic may be regarded from two standpoints. It may be examined in the light of the one, all-inclusive concept of nature it interprets, or it may be considered in the light of a desire to know its own intrinsic character as a logical theory. The first approach to traditional logic leads one to a survey of the doctrine of internal relations. The second point of view provokes an inspection of the logic of classes. Let us, at this point, summarily indicate the meanings of these two perspectives of traditional logic.

The Doctrine of Internal Relations.—As E. G. Spaulding has clearly pointed out[15] the theory that relations are internal means two things about reality. In the first place, the believer in the internality of relations holds that everything in the world is in modifying relation with everything else. F. H. Bradley's conception of the Absolute is an instance of internal theory of relations. According to Bradley, "in the Absolute no appearance can be lost. Each one contributes and is essential to the unity of the whole. . . . Deprived of any one aspect of element the Absolute may be called worthless. . . . There is nothing in the Absolute which is barely contingent or merely accessory. Every element, however subordinate, is preserved in the relative whole in which

[15] *The New Rationalism*, chap. III, sec. iii.

its character is taken up and merged."[16] Josiah Royce also supports the notion that everything in the world makes a difference to everything else. "Look at nature as we men find it," he writes. "Take account of our temporal and spatial universe. Review the results of our science. In all this you will discover manifold meanings relatively obtained, manifold interrelationships binding together facts that at first sight appear sundered, universality predetermining what has seemed accidental, and a vast fundamental ontological unity linking in its deathless embrace past, present, future, and what for us seem to be the merely possible forms of Being."[17]

This feature of the internal theory, which states that every individual entity in the world is what it is because all other things in the universe are what they are, is called by E. G. Spaulding "the modification theory of relations." It implies that reality must be known as one and as a whole to be truly known at all. To the new realist, who, as we shall learn later, maintains that the nature of reality can be revealed by analysis, the idea of truth as knowledge about the cosmos as a whole seems seriously fallacious.

The second notion about reality, which the internal theory of relations implies, is the conception that an underlying or transcendent reality is necessary for the maintenance of the unity between the entities of the world. This transcendent reality is the mediator of relations; it is the ground for the system of interpenetrating parts which constitute the world. The cosmic relater has had various titles. It has been known as Matter, Energy, Force, Mind, Spirit, Experience, Personality and God. E. G. Spaulding calls this formulation of the internal theory, which discusses the need of a great integrater to realize the Absolute, "the underlying-reality theory of relations."

The Logic of Classes.—The logic used to justify the theory that relations are internal is known as the logic of classes. It is also known as the logic of inclusion. It interprets reality as

[16] *Appearance and Reality*, pp. 456, 457.
[17] *The World and the Individual*, First Series, p. 423.

having the form of a proposition. The propositional form is that which presents the subject and predicate as terms in a special kind of relation. The predicate is not regarded as an element which may or may not be in relation to the subject. The subject and predicate are considered as in necessary connection. As Hegel put it, it is "false to speak of a combination of the two sides in the judgment, if we understand the term 'combination' to imply the independent existence of the combining members apart from the combination. . . . By saying 'This rose is red,' or 'This picture is beautiful,' we declare that it is not we who from the outside attach beauty to the picture or redness to the rose, but that these are characteristics proper to these objects."[18] According to the logic of classes, reality is a comprehensive class which includes all possible predicates. The world is a proposition in which the subject is the all-inclusive class of which all finite and partial aspects are the constituent members. To quote from Hegel again, the "predicate, as the phrase is, *inheres* in the subject. Further, as the subject is in general and immediately concrete, the specific connotation of the predicate is only one of the numerous characters of the subject. Thus the subject is ampler and wider than the predicate."[19] The view that the real is a subject, which is defined by its predicates, goes back to Aristotle. This ancient Greek philosopher had the conception that entities, like qualities, quantities and relations are predicates which belong to a subject.[20] Aristotle not only held the notion that predicates constitute the subject, but he also presented the idea that the subject of predicates could not itself be a predicate. To him, this characteristic of the real, that is, the fact that it can have a predicate but cannot be a predicate, gives to the real the nature of *substance*. The logic of classes is often called substance-attribute logic. E. G. Spaulding believes that this traditional logic arose because the early Greek thinkers were dominated in their reflections by the model of a *physical thing*.

[18] *Logic*, translation of W. Wallace, p. 299.
[19] *ibid.*, p. 302.
[20] See his *Metaphysics*, Book V.

The logical period of Greek philosophy was preceded by a cosmological era in which the philosophers were interested in discovering a natural stuff, by which the world might be explained. They were frankly concerned to find a physical substance, which could be regarded as a substratum in which the various qualities of being would inhere. This motive of the old cosmologists has run through philosophical speculation ever since, and "throughout its entire history philosophy has been *for the most part* 'thingized.' "[21]

The new realist vigorously opposes the logic of tradition with its emphasis upon internality and classes. To the exponent of new realism, the traditionalist's notion that knowledge of everything is necessary to know anything can lead only to skepticism or to dogmatism. It must either result in despair of ever arriving at truth, or it must conduce to an illegitimate optimism that the whole of truth is known. Both of these conclusions, believes the new realist, are contrary to the common sense of man. Let us now consider what type of logic new realism would substitute for the fallacious logical theory of the past.

IV. LOGICAL THEORY IN NEW REALISM

THE present remarks concerning the new realist's logic are only introductory. In Chapter III a thorough examination of the logic of new realism is made.

The new realist objects both to the doctrine of internality of relations and to the concept of classes in traditional logic. For them he substitutes, respectively, the theory of externality and the concept of relations. Let us notice, in a preliminary way, these two notions of realistic logical theory.

The Externality of Relations.—The new realist replies to the singularistic contention that values must be facts, or facts must be values, by asserting that there are both facts and values. In place of the historical thinker's interest in the preposition *in* he would substitute zeal for the conjunction *and*. The principle of

[21] See *The New Rationalism*, pp. 29, 30, 31, 33, 34, 35.

this in that of traditional theory is replaced in new realism by the principle of *this and that.* The new realist affirms that the claims of both naturalist and idealist are at least partially legitimate. There is a place for both existential and axiological features in reality. As R. B. Perry points out: "Science and religion are both institutions which serve man. A religious believer, since he is a man, needs science; as a scientist needs religion. . . . There can be no victories for science that do not promote man and all his works, including religion; nor any defect of science that is not a common disaster. For science and religion are the supporting wings of one army engaged in the conquest of ignorance and death."[22] E. G. Spaulding puts the broad scope of new realism in this wise: "Existents are of two kinds, mental and physical, and among these there are as many different kinds as such special sciences as physics, chemistry, physiology and psychology discover. Also *among subsistents* there are both *classes* and *individuals*, and as many *kinds* as such sciences as ethics, logic, mathematics and esthetics recognize."[23] When it is precursorily stated here that new realism deals with both existents and subsistents, and in a way to vouchsafe the integrity of each group, the motive of the new realist to recognize the validity of facts and values can be appreciated.

The believer in the externality of relations denies the contention that the real must be the all-inclusive absolute, of which relations, qualities, motions, changes, and so on, are constituent aspects. The external theory disavows the notion that terms are infinitely complex, and repudiates the doctrine that the entities of the world cannot exist in relation to each other without being held together by an underlying relater. The supporter of the theory of external relations, or pluralist as he is generally called, doubts the validity of the conception that everything in the world makes a difference to everything else. Setting out from the standpoint of science and scorning mystical and romantic aspirations, the new realist can only come to the conclusion that

[22] *Present Philosophical Tendencies*, p. 33.
[23] *The New Rationalism*, p. 256.

the external theory represents the true state of affairs. For, as R. B. Perry asserts: "Empirically, . . . the world is a mixture of oneness and manyness, of relevance and irrelevance, of disjunction and conjunction, of essence and accident. It has unity, but also variety; it is orderly, but only in a measure; it is good, but also in parts bad and indifferent. For better or for worse, it is just this homely, familiar old world, with some rhyme and reason in it, but with much that is arbitrary and inconsequential."[24]

The Logic of Relations.—The new realist views reality as consisting of discrete items, existing without causal inter-relation and without dependence upon some universal substance underlying them all. The standpoint is that of radical pluralism, or logical atomism. The logic supporting the doctrine is called the logic of relations, and is strictly opposed to any theory which maintains that relations are constitutive of existence in any form. The logic of relations does not deny validity to the logic of classes, but it does insist that relations of inclusion and exclusion are but two of an indefinite number of connections which may prevail between terms. The famous realistic polemic against the idealistic contention that "to be is to be perceived" is but a phase of the new realist's more fundamental attack against the internality of relations in general.

The exponent of the logic of relations believes that the traditional notion of substance is false. The internal relations theory, with its view that relations are properties of some fundamental stuff, is not true to facts. If the relations and other properties which an object possesses are annihilated, either by experiment or by imagination, the object itself disappears. Empirical experience is not capable of discovering any substance which underlies a system of attributes. So far as actual observation is possible, substance is never disclosed as anything more than a sum-total of its parts. Substance, as transcending its attributes, is not fact, but fancy. The logic of classes, furthermore, according to the defender of the logic of relations, is in-

[24] *Present Philosophical Tendencies*, p. 245.

adequate as an interpretation of certain affairs. All events in the world cannot be expressed in the subject-predicate logical form. Some entities in the world are not merely predicates of an all-inclusive subject. Some things in the world are relations which exist between different objects, and, as relations, are just as significant and real as the terms they relate. In the opinion of the new realist and other philosophers who attack the internal theory, to deny reality to relations would be to make unreal some of the most important entities of science. For instance, to the new realist, space, time and consciousness are items of the world which cannot be regarded either as substances or the attributes of substances. The doctrine of the new realist, that relations are independent of terms related, will be considered in greater detail in a later chapter.

As the logic of classes is the logic of speculation, the logic of relations is the logic of science. The method of the new realist is, therefore, the method of the scientist. What that method is, is a question to which we shall now give some consideration. This discussion, however, like other presentations in the present chapter, will be but introductory to a later and fuller treatment of realistic procedure.

V. THE SCIENTIFIC METHOD IN NEW REALISM

To the new realist, existences and meanings are both reached by the same way to knowledge. There is only one satisfactory method of knowing, whether knowledge sought be regarding matter or mind. Analysis is this sufficient procedure with which the new realist would examine the varied features of our multiform world. The confidence of the new realists in analysis leads them to contend that philosophy must adopt without reserve the methods of empiricism and experiment. Philosophy may differ from the sciences with respect to data, but it must be one with them in spirit. As the English new realist, S. Alexander, asserts in *Space, Time and Deity*: "It will like them use hypotheses by which to bring its data into verifiable connection. Its certainty like theirs will extend no further than its efficiency in providing

a reasoned exhibition of such system as can be discovered in these data."[25] This conviction is paralleled in the following words of a representative of new realism in America: "Philosophy should be brought into closest relation to science and should be the genuine result of man's entire scientific achievement. Of course it must be the result also of man's religious, moral and esthetic insight. But even as such it must remain vigorously scientific."[26] The realistic thinker believes that the philosopher has paid too much attention to the study of the history of philosophy. According to the new realist, the philosopher should be interested in special problems themselves, and not in another philosopher's interpretation of them.

In a later chapter we shall fully treat the analytical method of new realism, especially as it is championed by the mathematically-minded philosopher, Bertrand Russell. A word, however, regarding the motive behind the scientific procedure may not be inappropriate in the present anticipatory discussion.

The Purpose of Philosophy as Scientific.—This interest of the new realist in analysis is illustrative of his great zeal to get to the foundations of things and theories. He opposes naturalism, not because he has an intense desire to save the religious aspects of life, but because he considers naturalism's presuppositions false. He has the conviction, which A. Seth Pringle-Pattison expresses in *The Idea of God* (p. 47), that "the reassertion of human values is, in point of fact, effective and convincing only when it is accompanied by the demonstration that the conclusions of naturalism rest on a misinterpretation of the nature of the scientific theories on which they are based." Similarly, the new realist does not attack idealistic philosophy because he has no concern for spiritual reality. His only reason for denouncing idealism is his belief that the idealistic theory is built upon mystical faith instead of mathematical fact. R. B. Perry, in *Present Philosophical Tendencies* (p. 40), clearly states the new realist's standpoint in the following words: "The profit

[25] Vol. I, p. 4.

[26] W. T. Marvin, *A First Book in Metaphysics*, p. 10.

of religion, like the success of any worldly enterprise, is conditioned by the truth of its presuppositions, the correctness of the adaptation, on which it proceeds. . . . Hence to cherish illusions is to buy subjective satisfaction at the cost of real failure. To know the worst, if such it be, is as important as to know the best, and uncomparably more important than to dream the best." The new realist thoroughly agrees with W. M. Urban, who insists that before we can arrive at truth and existential judgments regarding ethical, esthetic or religious realities, "we must know what the demand for reality ultimately means."[27] The new realist has a place in his philosophy for the interests of both the "tough"- and "tender-minded," but he does not hesitate to affirm boldly that the manner of investigation, used by philosophers should be tough, and not tender. Whether or not his contention is justifiable that personality can be examined in impersonal fashion, or axiological realities interpreted in purely logical terms, is a question, which will receive discussion later on.

We have presented the two great points of view which may be taken regarding logic. One standpoint is that of the traditional thinker, who regards logic as a vindication of synthetic metaphysics. The logic of tradition, with its dependence upon theories that are absolutistic and singularistic, is soon appreciated as a theory which would exalt the concept of an all-containing class.

The other interpretation is that of the pluralistic thinker, who maintains that the subordination of logic to philosophy is both false and futile. To the exponent of this point of view, philosophy must be developed from, and not for, logical principles. The logical principles, fundamental to philosophy, acquaint man with the simplest concepts. They carry him back from considerations of reality in its most concrete forms to a treatment of being which is as abstract and qualityless as the entities of mathematics. Since even in the realm of the simplest

[27] *Valuation, Its Nature and Laws*, p. 400.

units inclusion and exclusion are but two of many connections, which may obtain between various items, the logic of this standpoint is appropriately entitled the logic of relations.

An elaboration and estimate of these two logical positions is the task of the next two chapters. The chapter, immediately succeeding, presents the new realist's interpretation and criticism of the singularistic standpoint. The second chapter following examines the new realist's pluralistic point of view and the mathematical basis upon which it is founded.

CHAPTER II

SENTIMENTAL SPECULATION

THE PROTEST OF NEW REALISM

NATURALISM and idealism, as the preceding chapter has indicated, are the two great antithetical philosophies, in which traditional theory has been expressed. Both of them are guilty of the grave fallacies incident to speculative procedure. To examine thoroughly the two systems, as they are found fallacious by the new realist, is the purpose of the present chapter. The realistic polemic against naturalistic philosophy will be considered first.

The Types of Naturalistic Theory.—The spirit of naturalism is one with that of new realism. Both repudiate all moral and personalistic presumptions in their approach to philosophical problems. Both employ the objective method of investigation, and both declare knowledge as revealed by science to be final. Furthermore, the attempt of the naturalist to reduce all qualitative variety in the world, all diversities in bodies, percepts, feelings, or thoughts, to mechanical, spatial configurations of mass particles in motion conforms quite well with the analytical motive of new realism. The new realist, however, finds naturalism to be a doctrine replete with error.

The fallacies of naturalism may be considered in two divisions. One class of errors comprises the fallacies which are discernible in native or metaphysical naturalism, or *materialism.* The other class contains the errors which are observable in critical or anti-metaphysical naturalism, or *positivism.* Positivism is more critical, and less substantistic than materialism, but both standpoints fail to realize that ultimate reality is not phys-

ical, but logical in character. Let us pass to an examination of the demerits which, according to the new realist, abide in materialistic philosophy.

I. THE DEFECTS OF MATERIALISM

BEFORE entering into a consideration of the materialist's doctrine it must be noted that the errors which new realism discloses in materialism are representative of a theory which has been superseded in the philosophy of science by positivism. The new realist's attack against materialism is, for the most part, indicative of criticisms which no longer have reason for being. To dwell upon the inadequacies of materialism is, as R. F. A. Hoernlé poignantly asserts, "to stir the ashes of a burnt-out controversy."[1]

The Speculative Dogma in Materialism.—In spite of his professions to the contrary, the materialist has been influenced, like the romanticist and the religionist, by personal desires. The monisms of matter or force in the doctrines of Büchner, Spencer, and Haeckel represent the craving for an absolute interpretation of reality, an interpretation as final and universal as is found in any idealistic theory. The materialist denies the reality of any creative soul or spirit, but his own basic entity is just as prolific as any productive agent of an idealist. The materialist declares that he has no need of God, but nevertheless he endows his ultimate substance with all the potentialities of the Supreme Being. That Spencer yields to the speculative dogma, and that he uses verbal suggestion are apparent from the fact that he deifies his basic reality, force, by such ascriptions as "infinite and eternal energy," "inscrutable existence," and "omnipotent power."

The Supreme Speculative Postulate of Materialism.—The conservation of energy theory is the outstanding instance of the speculative ideal in materialistic thought. In criticizing the theory as it is represented in Spencer's notion of the persistence of force, Bertrand Russell of the English school of new realism

[1] *Studies in Contemporary Metaphysics*, p. 205.

points out three distinct errors in the assumption. In the first place, he objects, scientific investigation, with its detailedness, does not presuppose any such general laws as its results are found to verify. The second error is that of identifying a constant quantity with a particular entity. Neither energy nor mass, although mass has often been defined as quantity of matter, is a substance permanently persistent through change. Thirdly, the progress of physics has shown that large generalizations, like the conservation of energy theory, only approximate certainty. It is good that this is so, thinks Russell, for "as soon as such a principle as the conservation of mass or energy is erected into a universal or *a priori* law, the slightest failure in absolute exactness is fatal, and the whole philosophic structure raised upon this foundation is necessarily ruined."[2]

The materialistic doctrine of the first half of the nineteenth century is, to Walter Stallo, a survival of medieval realism and a case of the metaphysical error of the "synthetic view." Materialism's substantial elements, matter and force, are legitimate logical descendants of the *universalia ante rem* and *in re* of the scholastics. The order of reality is completely inverted and the most abstract and the most general concepts are considered the most real forms of existence. The fallacy of hypostatization occurs in that the highest concepts, "which include the properties common to all things, are assumed to constitute their substance, i.e., the permanent, invariable substratum of the properties by which the particular things are distinguished, these being regarded, by reason of their variability, as mere incidents."[3]

The Subjectivistic Character of Materialistic Speculation.—C. A. Richardson has a unique explanation of the fact that materialists, no less than idealists, are dominated by an emotional bias. The materialists, in spite of their repudiation of such notions as God, freedom and immortality, are nevertheless subject to the influence of personal desires. He points out that it is the "tendency for a strong emotion or desire, referred to a par-

[2] See *Mysticism and Logic*, p. 104.

[3] See *The Concepts and Theories of Modern Physics*, pp. 148 *ff.*

ticular object, to turn to its polar object." We develop a more or less conscious resistance "against anything which appears to curtail our liberty by exercising a strong influence over our actions." "The ardent materialist feels, whether consciously or unconsciously, the drive of those great primal longings (faith in God, freedom, and immortality), no less than does the ordinary mortal, but he resents their influence—he will turn the cold light of remorseless reason on these spiritual fantasies, and dissipate them as the springing breeze scatters the morning mist. Yet he forgets that this attitude is but the negative aspect of those very desires he is endeavoring to crush, and is itself the outcome of a resistance which consists in impulses comparable strength for strength with those of his somewhat despised antagonist."[4]

The materialist, in succumbing to the speculative dogma, is guilty also of the fallacy which the new realist finds so objectionable in idealistic theory. In fact, to the new realist, it is an error whose disclosure means the downfall of idealism. It is the fallacious assumption that for every concept there must be some objective reality, an assumption which generalized to the limit means that the universal concept must be indicative of the true nature of reality as a whole. Materialism is generally considered merely as the theory which interprets the world in terms of matter or force, and the notion that these ultimates are themselves hypostatizations of mental concepts is disregarded. Indeed, for Spencer, as he makes clear in Chapter III of *First Principles*, the ground of reality is after all not force, but consciousness or experience of force. Haeckel's monism is severely antagonistic to interpretations of force and energy as psychical activity or appetency, but, as R. B. Perry points out, though Haeckel's "underlying substance, or primitive force, cannot be identified with any of its manifestations. . . . yet it is reached by *passing through and beyond these.* It is these manifestations so qualified as to annul their specific character, but without destroying the

[4] *Proceedings of the Aristotelian Society*, 1920, p. 51.

suggestive power of their names."[5] When both naturalists and idealists are guilty of making experience basic, it is no wonder that, as we shall see later, the new realist centers upon the solution of the ego-centric predicament as his most important task in the clearing of philosophy of its traditional shortcomings.

The Error of Pseudo-Simplicity in Materialistic Theory.— Along with the fallacy of the speculative dogma, the form of the error of pseudo-simplicity, called that of indefinite potentiality, is found in materialism. The ultimate substance is considered to be an essence apart from its qualities; it is not defined in terms of its properties and manifestations, but as an entity exclusive of them. As R. B. Perry puts it: "Everything can be claimed for matter (and the same might be affirmed concerning force), just in proportion as matter is not identified with anything in particular. Science is constantly finding it to possess unexpected properties. As a potentiality with assignable limits, it may be as reasonably endowed with 'intelligible' force as with 'physical' force; and no man can foresee what further powers it may in the future reveal."[6]

The vigor of this fallacy is due to the fact that man is prone to identify the simple with the familiar. We apprehend the strange in terms of the ordinary. The materialist is subject to this error when he explains reality with its manifold newness as forms of the solid matter with which even the most infantile of intellects is familiar. But familiarity breeds contempt. The consciousness of solid matter is too intimate; it is so familiar that it reveals the limitations and insufficiencies of matter as a complete ground of being. It is so specific that it becomes suggestive of motionless physical realities alone, and does not provide for such entities as energy, life or consciousness. Consequently, in materialistic theory the concept of energy or force is more prominent than that of matter. The concept of energy has not the definite connotation possessed by the concept of matter. It seems more reasonable to begin force with a capital

[5] *Present Philosophical Tendencies*, p. 74.
[6] *ibid.*, p. 69.

letter than to capitalize the *m* in matter. Matter has a precise meaning, barely suggestive of an unlimited power in the substance. Force has a vague significance, and readily permits an ascription of indefinite potentiality to it.

As, in yielding to the speculative dogma, the materialist arrives at a theory of substance by hypostatizing a concept, similarly, in succumbing to the fallacy of indefinite potentiality, he arrives at a theory of causality by hypostatizing a concept. In the former case, he "thingizes" the concept of matter to get an ontology; in the latter, he "thingizes" the concept of activity in conscious experience to get a cosmology. In both cases, says the new realist, he mistakes intimacy for simplicity, and, because of his failure to analyze, he projects into reality as a whole significances not even valid for the cases on which his projections are grounded.

The Fallacy of Exclusive Particularity in the Materialist's Doctrine.—This error, as it has been defined previously, is the mistake of ignoring differences in order to satisfy the speculative ideal. It is the neglecting of some features of reality in order that a universal system may be constructed in terms of some other features. In materialism it is the error of reducing quality to quantity, mind to matter. In E. G. Spaulding's words, it is the acceptance of the position "that *all* fact without exception is of the nature of physical or material 'things'—either matter, or energy, or, as the more sophisticated physicists of the day would claim, electricity."[7] All phenomena are reduced to "the dead level of a single type," a reduction perfectly legitimate in a science like mechanics or molar physics where facts are all of the same order and advances and novelties do not occur. But in the biological, psychological, and sociological sciences the materialist's reduction is a practice which overlooks the very events which these sciences, as different from physics, seek to explain. This "method of interpreting the more developed by the less developed is, according to the non-realist, A. Seth Prin-

[7] *The New Rationalism*, p. 258.

gle-Pattison, logically tantamount to a reduction of the more to the less, and therefore to a denial of the very thing to be explained. To the idealist, F. H. Bradley, the fallacy of materialism, in this connection, is that of assuming that primary qualities can exist independently of secondary qualities. Using the term, extension, as connoting the class of primary qualities, he argues that "extension cannot be presented, or thought of, except as one with quality that is secondary. It is by itself a mere abstraction, for some purposes necessary, but ridiculous when taken as an existing thing. Yet the materialist, from defect of nature or of education, or probably both, worships without justification this thin product of his untutored fancy."[8]

The Consequences of the Errors in Materialism.—Two general weaknesses result in materialistic theory because of the presence of the fallacies discussed above. One is agnosticism; the other the aspect of self-refutation. Both of these deficiencies evoke hostile criticism from the new realists. Agnosticism results from the desire to make the physical substance the complete explanation of all things. Since, even to the materialists, events apparently new are constantly appearing, the substance must be endowed with an indefinite potentiality, an ability to rise to all occasions. Matter or energy therefore becomes an unknown, or at least a partially known, entity towards which the materialist must necessarily take an agnostic position.

E. G. Spaulding finds materialism to be self-refuting because of its phenomenalistic character. His argument is somewhat as follows: Since conscious processes are physical, and since all physical processes, according to materialism, "causally interact and affect one another, it is implied that every specific knowing process must affect, modify, and alter the thing known."[9] This, however, refutes the materialist's own theory, because, when he uses the objective results of natural science to establish his doctrine, he treats all knowing as externally related to and independent of entities known. This argument, used by Spaulding

[8] *Appearance and Reality*, p. 17.
[9] *The New Rationalism*, p. 263.

against materialism, is used by him also to show that all philosophies, except new realism, are inconsistent systems. In the opinion of Spaulding, skepticism, individualism, pragmatism, naturalism, positivism, idealism and phenomenalism must either allow exceptions to the notion that all relations are modificatory or admit the impossibility of actual knowledge of these doctrines. For, if the exponent of any of these standpoints should insist that all relations modify the entities with which they are in relation, he would be forced to admit that knowing, as a relation, would change the nature of the doctrine, which he, as a champion of a theory, is so anxious to have known. To escape from his difficulty he might assert that knowing is a relation which does not make a difference to terms related. To make this assertion, however, would be to accept one of the most important principles which new realism espouses. It would be to acknowledge the legitimacy of the external theory of relation in one of its most crucial contexts.

So much for a discussion of the errors which the new realist declares to be destructive of materialistic naturalism. Let us now pass on to a discussion of new realism's polemic against the form of naturalistic theory known as positivism.

II. THE DEFICIENCIES OF POSITIVISM

THE positivist acknowledges the validity of the criticisms which are made against naturalism as materialism. Positivism definitely repudiates on empirical grounds the notion that matter or force is a self-existent, permanent entity, and, no more than materialism, has it a place for spirit or mind as ultimate substance. The materialist is agnostic towards the attributes of things-in-themselves; the positivist, following the leading of Hume, J. S. Mill and Comte, is agnostic with regard to the very existence of substantial stuffs. Matter and mind, as substances, are not only not unknown, for the positivist; they are also unknowable. The positivist scorns all concern for first causes. He would erect a philosophy upon human experience. He would find as his starting point in philosophical interpretation the facts of

reality, which, as *phenomena*, present themselves to him in sense perception. Matter and mind are merely names used to denote certain relations of percepts or certain relations of ideas built upon percepts. Prominent among the positivists of recent years have been Ernst Mach, author of *Analysis of Sensations*, translated by C. M. Williams; W. K. Clifford, who wrote *Seeing and Thinking* and *Common Sense of the Exact Sciences;* Henri Poincaré, who has given us *Science and Hypothesis*, translated by G. B. Halsted; and Karl Pearson, whose theory of knowledge and nature appears in *The Grammar of Science.*

We shall take the positivistic doctrine of Pearson as illustrative of the second type of naturalism which fails to meet the logical requirements set up by the new realist.

Positivism as a Philosophy Founded on Facts.—Karl Pearson argues in *The Grammar of Science* for the priority of fact in science, but he considers facts as contents of mind. Pearson's positivism might well be called phenomenalism. For him, truths about nature must either be immediate sense impressions or constructs, which are formed by the union of immediate sense impressions with associated stored impressions. The constructs make up the real world; they are the phenomena of science, which we project outside ourselves and give the aspect of externality. Because we have practically the same perceptive faculties, two individuals construct virtually the same universe, and the results of thinking in one mind have validity for the mind of another. The universal validity of science depends upon the similarity of the perceptive and reasoning faculties of man, as civilized and normal. The brain is a central telephone exchange where the messages of sense impressions are received and motor impulses despatched. "Without sense-impressions there would be nothing to store; without the faculty of receiving permanent impress, without memory, there would be no possibility of thought; and without this thought, this period of hesitation, there would be no consciousness. When an exertion follows immediately on a sense-impression we speak of the exertion as involuntary, our action is subject to the mechanical control of

the 'external object' to which we attribute the sense-impression. On the other hand, when the exertion is conditioned by stored sense impressions we term our action voluntary. We speak of it as determined from 'within ourselves,' and assert the 'freedom of the will'" (p. 45). "Other consciousness is an inference, which, not yet having verified by immediate sense-impression, we term an eject; it is conceivable, however, that it could become an object. Consciousness has no meaning beyond nervous systems akin to our own; it is illogical to assert that all matter is conscious, still more that consciousness or will can exist outside matter. The term knowledge is meaningless when extended beyond the sphere in which we may legitimately infer consciousness, or when applied to things outside the plane of thought, *i.e.*, to metaphysical terms dignified by the name of conceptions although they do not ultimately flow from sense-impressions" (p. 75).

Karl Pearson carries over this sensationalistic and phenomenalistic point of view into his consideration of causality. Cause, for this positivist, is a scientific term, used to denote an antecedent stage in the routine of perceptions. Force as a cause is meaningless, and first cause has meaning only as the limit, permanent or temporary, to knowledge. In our experience occurs no instance of first cause in the popular sense of the term. Furthermore, there is no inherent necessity in the routine of phenomena. The only necessity is that which the permanent existence of rational beings as the scene of routine perceptions necessitates. Pearson substitutes for the materialist's metaphysical idea of causal force the more practically profitable category of association or correlation.

Certainly there is little that suggests substance philosophy and Aristotelian logic in a theory like this of Pearson. What fault can the new realist find with its contentions? The answer is that even in positivism the old fallacies still lurk. The positivist, in spite of his emphasis upon relations, upon "what happens and is done," upon events and disembodied qualities, is still concerned, to some extent, with the things that serve as substance. The

theory of Pearson illustrates how the positivist is subject to the fallacies of the speculative dogma, pseudo-simplicity and exclusive particularity.

The Speculative Dogma in Positivistic Theory.—Pearson, as a positivist, reveals the influence of the speculative ideal upon his thinking in his discussion of the facts of science. Notwithstanding his hostility to metaphysical entities, he presents a psychology, in his telephone-exchange theory, that has a necessary and important place for *ego* in consciousness. He has a theory which obliterates an external thing as the cause of the sequence of sensations, but he still has need of a cause for the sequence, and making it psychological does not save him from being metaphysical. To be sure, he treats the psychological ground of the routine of perceptions as physiological rather than mental. This only means, however, that he prefers a doctrine of substance which is materialistic and not idealistic.

If Pearson's positivistic naturalism does not end in materialistic naturalism, his position is not securely supported. Pearson argues for the extension of scientific knowledge on the basis of its utilitarian value. Science will make possible more adequate adjustments to the environment, and therefore will make for an efficient race. As A. K. Rogers points out, this utilitarian argument for science "loses its point if there is no determinate reality to which we need adjust ourselves, corresponding to the routine which science formulates."[10] In fact, the psychological ground for the sequence of sensations implies a prior material world. As R. B. Perry contends: "The sense-impression is a derivative of the whole naturalistic scheme, and means nothing apart from that scheme. . . . It is perfectly evident, in short, that sense-impressions, in their structure and given order, presuppose the whole physical system."[11] If Pearson had no conception of a physical ground for impressions, he would have no basis for distinguishing phenomena as either mental or physical. Indeed, the logically legitimate standpoint for him to take would be

[10] *English and American Philosophy Since* 1800, p. 408.
[11] *Present Philosophical Tendencies*, p. 77.

to be agnostic regarding the material or mental character of his basic facts. (Mach is more logical than Pearson in this connection. He regards facts as *elements*, whose material or mental aspects depend upon the different relations into which they may enter.) Finally, in another regard, Pearson refuses to go to the skeptical extreme which his positivistic position implies. His phenomenalism should prevent him from ascribing certain characteristics to the supersensuous realm. When he calls the realm beyond sense-impressions chaotic and irrational, he transcends factual experience and makes judgments not permitted by positivistic logic.

In his chapter on scientific law Pearson denies any rationality to nature. In his chapter on cause and effect, however, he seems to believe that there is in nature something extremely like action in conformity with a highly intellectual principle. But is not rationality conformity with a highly intellectual principle? This is a question which C. S. Peirce raises in his criticism of Pearson's standpoint.[12] Pearson suggests "correlation" as a substitute for the traditional concepts, cause and effect. He believes the term, correlation, to be devoid of "substance" implications. He introduces into the concept of correlation, however, the connotations of purpose and power possessed by the traditional terms. In his discussion of the laws of nature he uses the term, influence, with all the meanings which have in the past been attached to "cause." His idea of the "creative imagination" and his notion of the "conceptualizing faculty," by which man is interpreted as virtually making nature, functionally have the import of the traditional philosopher's underlying reality.

The Error of Pseudo-Simplicity in the Positivist's Position.— The positivist regards sensation as the ultimate basis of philosophical interpretation. The sense datum, he believes, is the simplest form of being capable of being experienced. In this opinion he is in error, according to the new realist. Sensation, even in its most simple case, is, in the judgment of the

[12] See *Popular Science Monthly*, Vol. XLVIII, pp. 296-306.

realistic thinker, complex. The positivist is a better scientist than the materialist because he analyzes further than the materialist, but he is not the true scientist. Sense data may be analyzed into parts. Only those who go on to the division of sense-impressions are truly of scientific genius. This error of incomplete analysis on the part of the positivist is fully explained later in our examination of the new realist's refutation of subjective idealism.

The Fallacy of Exclusive Particularity in Positivism.—The positivist is guilty of the form of the fallacy of exclusive particularity, known as definition by initial predication. This is present in Pearson's positivism in the theory of this philosopher that moral, esthetic and religious categories can best be interpreted in terms of scientific concepts. The good, the true, and the beautiful, for the positivist, will ultimately be explained in the equations of natural science. Such a standpoint overlooks altogether the fact that ethics, esthetics and religion deal with realities that, to an extent at least, defy analysis, measurement and precise formulation. One wonders indeed why the positivist, with his theory that reality is simply a series of sense-impressions, should be so concerned even to reduce morality, art or religion to science. Why should the positivist be serious anyway about such matters as value or truth? As J. A. Leighton pointedly inquires: "Why should a solipsistic skeptic ever take the trouble to state even his negative theory of knowledge, if he is in doubt whether there is anyone to hear him or read him, and especially since *he himself* only exists for the passing thought?"[13]

R. B. Perry states an objection against Hume, which is pertinent to Pearson's theory and to positivism generally. To Perry, Hume is influenced by the fallacy of exclusive particularity in holding the elements of physical nature to be the same as those of mental nature, and, "instead of recognizing their interchangeable character," naming "these elements, following Berkeley, after one of the rôles in which they appear."[14] The exclusive

[13] *Man and the Cosmos*, p. 74.
[14] *Present Philosophical Tendencies*, p. 138.

order, with which Hume identified the entities of the world, is the order which positivists traditionally have favored, namely, the realm of subjectivity, or mental experience.

The Consequences of Fallacious Thinking in Positivism.—Before concluding our discussion of positivism as laden with errors, which the new realist is zealous to hunt and hate, let us indicate two all-inclusive and outstanding objections to positivistic theory. In the first place, positivism is self-refuting; in the second place, it is not rigorously scientific. The first criticism is that made by E. G. Spaulding, a criticism which we have already stated as one of his reflections against materialism. Positivism must allow for a knowledge of general principles, and in such a way that the knowing of them is not dependent upon the knower, or else positivism refutes itself. Since, in positivism, general principles are not independent of the knowing agent, but are subject to modification as the knowing agent changes, positivistic doctrine, Spaulding avers, can only be a relative and shifting philosophy.[15] This argument of Spaulding's is virtually another version of the objection, already stated, that positivism leads to skepticism.

The second prominent defect of positivism is one which R. B. Perry, in his *Present Philosophical Tendencies*, discloses in all philosophies other than new realism. It is the failure of the positivist to make good his claim to be scientific. The new realist deplores in positivism the traditional fallacies, but he recognizes, after all, that the positivist himself is aware of their undesirable presence. They are unintentional mistakes, which the positivistic thinker would himself eradicate. Ultimately, the chief fault which new realism finds with positivism is not in what it asserts, but in what it fails to assert. The positivist fails to appreciate the fact that physical entities, or the mental states, of which the things of physics are constructs, are not basic. The positivist is a critical naturalist, but he is more naturalistic than critical. He is more interested in nature than

[15] See *The New Rationalism*, p. 250.

in criticism. He allows his passion for the fundamental to cool too soon. What grieves the new realist is the failure of the positivist to see that physical terms, even if interpreted as subjective phenomena, are too "qualitied" to be the ultimates of being. The positivist, to be sure, is closer to the truth than is the materialist. But the exponent of positivism does not enter the promised land; he succumbs right on the mount of insight and vision. He does not grasp the great realistic conception that the basic truths of reality are those of logic and mathematics, not those of physics. He fails to recognize the great truth, which the new realist appreciates so well, that ultimate reality is not physical or mental, but logical in character.

It would be interesting to explain at this point what the new realist means by declaring logic to be the foundation of the universe, but the other great philosophy against which new realism is a polemic, is yet to be examined. What is the nature of idealism that the new realist should find it so full of error? This is the question which now calls for our attention.

The Situation of Idealism in its Relation to New Realism.— The idealist is being put severely to the test in these latter days. Humanists, pragmatists and vitalists protest against his theories, but the new realist alone is touching the idealist to the quick. As May Sinclair asserts, the real, live and formidable enemies of idealism are "not the dualism of Messrs. Dewey and Schiller, nor yet the pluralism of William James, but the pluralism of Mr. Bertrand Russell, Mr. G. E. Moore, Mr. Alexander and the new realists of the United States."[16] The new realist assaults the basic conceptions upon which the idealist's philosophical disciplines are founded. He weighs idealism's fundamental notions in the balances of logic and finds them wanting. Idealism, like naturalism, is discovered to be guilty of the tragic fallacies which throughout the ages have prevented philosophy from being a bearer of truth. Aristotelian logic is revealed as having influenced the idealist even more completely than it has swayed

[16] *A Defense of Idealism*, p. 152.

the naturalist. The idealist is exposed as being hopelessly dominated by the internal theory of relations.

The reaction of the exponent of idealism to the polemic of the new realist is entirely different from the naturalist's response. Naturalism, at least the contemporary form known as positivism, is contritely cognizant of its failures and is trying to purge itself of traditional shortcomings. It insists that, if it is guilty, its errors are the sins of omission and not the faults of commission. Idealism, however, assumes no such penitent attitude. The notions in idealistic theory, which the new realist condemns as false, the idealist exalts and transfigures into everlasting truth. The idealist proudly glories in the very theories which the naturalist penitently laments and the new realist vituperatively decries.

Subjectivism and Absolutism as the Two Great Forms of Idealism.—To the idealist, the traditional assumptions, against which new realism presents its invectives, cannot be errors, since they are made necessary by the fundamental character of thought. They are the natural result of the fact that all our theories and doctrines presuppose knowing. This is the main thesis of idealism as *subjectivism*. Confidence in the tenets of subjectivism leads the idealist into assuming that the unity of his own mental life is indicative of an organic and systematic character in reality as a whole. This assumption of cosmic order constitutes the essential theory of idealism as *absolutism*.

As we discussed the deficiencies, which the new realist finds in naturalism, by examining the imperfections of its two forms, materialism and positivism, we shall investigate the new realist's attack against idealism by noticing his objections to the two idealistic doctrines, subjectivism and absolutism. The realistic polemic against subjective idealism will be considered first.

III. THE WEAKNESSES OF SUBJECTIVISM

THE contention that epistemology is the fundamental science is the preeminent thesis of the idealist, which the new realist would refute. For the exponent of new realism believes that, if he

shows the priority of consciousness to be a false conception, the strongest argument presented in philosophy for the internality of relations goes to the wall.

The Error of Exlusive Particularity in Subjective Idealism.—To the new realist, the epistemological bias of the subjective idealist is a gross instance of the error of exclusive particularity, called the fallacy of initial predication. The idealist, as subjectivist, makes epistemology, that is, the theory of knowledge, the fundamental doctrine of philosophy. In the opinion of the new realist, the idealistic thinker succumbs to the weakness of initial predication because he is influenced, even as a subjectivist, by the speculative ideal. A doctrine which regards epistemology as ultimate is personal and satisfying to man's romantic and mystical interests. If knowing is made constitutive, or if things are considered to be of the nature of experience, then it is easier to feel at home in the world. In deeming consciousness as fundamental, "that very mechanical cosmos which had served to belittle man, is now made," as R. B. Perry points out in *Present Philosophical Tendencies* (p. 119), "to glorify him through being conceived as the fruit of intelligence."

The Ego-Centric Predicament.—This argument of the subjective idealist that the being of things is dependent upon their being known has its plausibility in a certain predicament in the knowing process. The predicament, generally known as the "egocentric predicament," is, in the words of E. G. Spaulding, the situation "that we cannot escape the fact that the known world,—the only world we know is, in every instance, related to some kind of knowing."[17] R. B. Perry defines it as "the impossibility of finding anything that is not known."[18] The predicament arises because one cannot conceive of things as existing apart from consciousness. For to conceive of them as external to consciousness is to bring them *ipso facto* within consciousness.[19] The idealist believes that the impossibility of escaping from the

[17] *The New Rationalism*, p. 315.
[18] *Present Philosophical Tendencies*, p. 129.
[19] See *The New Realism*, p. 11.

difficulty justifies the theory that reality is fundamentally mind. The new realist, on the other hand, though acknowledging the difficulty, argues that the predicament does not indicate the priority of the mental. How the new realist seeks to refute the argument, which the idealist bases upon the predicament, is the question we are immediately to consider.

The Derivative Character of Epistemology.—One way which the new realist has employed to show that consciousness is not prior is to argue that epistemology, which in idealism is regarded as the fundamental science, is not fundamental at all. This is the tack taken particularly by the American new realist, W. T. Marvin.[20] It is Marvin's position that epistemology is a science as the other sciences are sciences. It studies knowledge as a natural event in the same way that biology studies life, or physics investigates light. It is not the fundamental science by any means, because it assumes the principles of logic and the results of several special sciences in order to develop its conceptions.

Epistemology has been regarded as basic, because the laws of thought have been identified with the laws of logic. Confidence in logic on the one hand, and belief that logic is a science of mentalistic entities on the other, have resulted in the traditional conviction that a logical interpretation of reality must be epistemological. But logic, Marvin insists, is not a science of thought or reasoning. The formulas of logic are as different from the laws of thought as the undulatory theory of light, or the Mendelian law of heredity. The classes and their relations, studied by the logician, are truly aspects of the world about him as are the phenomena of heat and light, studied by the physicist. Logic is used in reasoning in the same way as it is used in physics. Epistemology, as the science of the possibility of knowledge, involves a vicious circle. The epistemologist must assume the possibility of knowledge to demonstrate his theory of the possibility of knowledge. He is no better off than the other scientists

[20] For W. T. Marvin's arguments, see *The New Realism*, pp. 45 *ff.*

who, he declares, are dependent upon epistemological theory to assure them of the possibility of knowledge.

The ultimate, according to Marvin, is not the knowing process, but perceived truth. We do perceive or know some propositions to be true, and no further assumptions, premises or explanations lie logically behind this knowledge. The epistemological question regarding the possibility of perceiving the propositions to be true is meaningless. Perception is the ultimate test, a test which does not presuppose its own possibility. The man who questions it assumes it in order to do the questioning. Perception simply is. Epistemology, therefore, is not *sui generis*, but empirical and inductive, as are most sciences.

Two other American new realists ably contend with W. T. Marvin that epistemology is not fundamental. W. P. Montague argues against the epistemological bias as follows: "Logic, like every science, has its special psychology and its special pedagogy as parts of its technique. But to infer from this that logic is a mental science would be as wrong as to infer that astronomy was a branch of optics."[21] E. B. Holt bears out Marvin's contention by describing the epistemological situation in this lucid way: "Epistemology has known nothing of the nervous system, has left its really crucial problem to the psychologist, in order to devote itself to morbid analysis of the reflective act, and to study the so-called subject-object relation, and of knowledge in general, but always among disembodied knowers—a case of 'Hamlet' with the court of Denmark left out." The epistemologist is like Kant, who "found the knowing process everywhere, and seems never for a moment aware of those considerations which oblige the experimental psychologist to find this knowledge process somewhere.[22]

The Error of Pseudo-Simplicity in Subjectivism.—It is significant for the new realist to point out that the epistemological standpoint of idealism is a case of the fallacy of initial predication, but he must also explain why the idealist is susceptible

[21] *The New Realism*, p. 262.
[22] *The Concept of Consciousness*, pp. 85, 86.

to such fallacious procedure. This the new realist does by demonstrating that the idealistic position rests upon a false conception of consciousness. Failing to analyze mind thoroughly, the idealist perpetrates the error of pseudo-simplicity, by calling the mental character of experience purely subjective. If he were more analytical, the idealist would observe that experience is not a subjective simple, but a subjective-objective complex. Let us notice how the new realist has sought to prove that analysis destroys the epistemological prejudice.

The Realistic Argument against Experience as Solely Subjective.—The earliest attack against the subjective character of experience was that of the English new realist, G. E. Moore.[23] The title of Moore's polemic is "The refutation of Idealism." In this article Moore maintains that the idealist is wrong in believing that consciousness is constitutive of that which is known. The subject and object of knowledge are not necessarily connected. The idealist remains in the ego-centric predicament because he mistakenly identifies sensation or idea with the object of sensation or idea. He believes *esse* is *percipi* because he does not recognize the difference between *esse* and *percipi*. In every sensation there are two distinct terms: consciousness, in which respect all sensations are alike, and the something else, in respect of which one sensation differs from another. In every sensation there are consciousness and the object of consciousness. To say that "blue exists" is the same as "both blue and consciousness exist" is to make a self-contradictory statement. Blue can conceivably exist apart from the sensation of blue. A sensation is, in reality, a case of knowing, or being aware of, or experiencing something. Therefore, a sensation of blue consists of the awareness plus the blue, which is the content or object of the sensation.

Upon this theory, believes Moore, it is not difficult to explain how we get outside the circle of our sensations and ideas. To have a sensation is to be outside. It is to know something which

[23] *Mind*, *N.S.*, Vol. XII, 1903, pp. 433 *ff*.

is truly not a part of our experience. According to Moore, the wonder is, not that we suppose that anything exists corresponding to our sensations, but that we suppose the material things do not exist, when their existence has precisely the same evidence as that of our sensations themselves.

The predicament of subjectivism, in the opinion of Moore, is none other than that which characterizes a tautologous statement. When *esse* is taken to equal *percipi* we cannot deny that *esse* is *percipi*. But the fact that we cannot deny a proposition is no indication that it has significance. To believe so is to commit the fallacy of illicit importance. A tautology or redundant proposition is not a proposition at all; it tells nothing about the character of things. Again, the identification of *esse* with *percipi* is an illustration of the error of exclusive particularity in the form of false inference. The method of argument is used without any support from the method of difference. The possibility of negative instances is overlooked altogether. Indeed, as R. B. Perry notes in *Present Philosophical Tendencies* (p. 131), "the ego-centric predicament itself prevents the observation of negative cases."

The following quotation will show how similar R. B. Perry's solution of the predicament is to G. E. Moore's: "Of course, the *consciousness of a thing* is made up of a thing and its relation to consciousness. But the thing then contributes its own nature to the conscious complex, and does not derive it therefrom. If *a* is in relation to consciousness, then consciousness-of-*a* is constituted in part of *a*, but *a* itself is not constituted of consciousness."[24] The same author, in criticizing F. H. Bradley's thesis that fact cannot be found unless in unity with sentience, contends that this proves no more than that finding is finding. Perry is confident that "no amount of reiteration or verbal alteration can ever make it (the ego-centric predicament) prove what the idealist wants it to prove—namely that *being* is finding, that in order to be or to be what they are, things must be

[24] *Present Philosophical Tendencies*, p. 320.

found."[25] Perry's original article on the ego-centric predicament appeared in *The Journal of Philosophy* (Vol. 7, pp. 5 *ff.*). In the discussion in this periodical Perry grants the existence of the predicament as a ubiquitous difficulty. Consciousness cannot be eliminated from one's field of study, because *I study*, *I eliminate*, etc., are all situations in which the relation, consciousness, is present. We cannot find anything outside of consciousness, because, as was stated above, finding is a form of consciousness. It is methodologically impossible to compare a thing before and after it has been in another's consciousness without one's own consciousness being brought into play. Moreover, a knowledge situation cannot be analyzed into its parts in order that the physical aspect might be dealt with, because *dealing with* implies consciousness. Finally, when the consciousness feature is eliminated from any situation, nothing can be learned about the affair. If I close my eyes, I cannot see what happens to the object, and if I stop thinking, I cannot think what happens to it.

Admitting the presence of the predicament is not to Perry, however, an admission that the predicament proves anything. The predicament does not support an ontological position, as the idealists assume. Perry shows how the three ontologies, creative idealism, formative idealism, and the identity theory of idealism, have all arisen because their proponents have found more in the ego-centric predicament than the situation warrants. The first type of idealism, creative idealism, or solipsism, is, according to Perry, an instance of the fallacy of *post hoc, ergo propter hoc.* By the logic of the method of agreement mind is regarded as a cause of nature, but the consideration, that the method of agreement, unsupported by the method of difference, is not sufficient for proof, is not heeded. The formative idealism argues for the priority of mind on the ground that nature possesses system. Rational categories are regarded as significant of organizing experience. The defenders of this type of idealism, however, do not show that categories are impossible without ex-

[25] *Present Philosophical Tendencies*, p. 134.

perience. It is as legitimate to believe that categories are the function of things, as to maintain that things are the function of categories. The exponent of formative idealism falsely identifies categories as the conditions of being with categories as the conditions of experience, or consciousness of being. The identity theory in idealism asserts that the knower and the known are one. This idealistic conception arises, believes Perry, because consciousness is given a character which we give to no other entity, namely, the character of being both prior to, and identical with its parts. Consequently we identify "knowledge of a thing" with its parts, *knowledge* and *thing*. *Knowledge* and *thing*, both being considered as identical with the complex *knowledge of a thing*, they are taken as identical with each other. The entire argument is barren dialectic, and gives no information regarding the nature of the physical thing in or out of the knowing situation.

Analysis in Situ as a Solution for the Ego-Centric Predicament. —E. G. Spaulding finds in *analysis in situ* a way out of the ego-centric predicament. "Analysis *in situ*" is studying one class of entities of a complex whole as if the other entities in the complex were not present. It is a very profitable method of analysis in discovering the nature of details of a whole, which cannot be experimentally rent asunder. It is a method of *virtual elimination*, that is, it segregates the parts of a whole in effect, though not in actuality.[26] In virtue of this kind of analysis the idealist's conclusions can be revealed as groundless. Analysis *in situ* makes possible the discovery that the *known* is not dependent upon the *knower* in the knowing situation. Knowing cannot be experimentally annihilated, but it can be shown to have no constitutive power. The factors in experience, namely, the experiencer and the experienced, are disclosed as in functional, not causal relationship. Experience is philosophy's most significant illustration of a possible compatibility between independence and relationship. "*By an analysis* in situ *knowing can*

[26] *The New Rationalism*, pp. 27, 158.

always be left in relation to the entity known, and yet the two be discovered *to be in external relation.*"[27] For Spaulding, all non-realistic philosophies, subjectivism included, tacitly assume the legitimacy of analysis *in situ*. If they did not make such an assumption, they would refute themselves. For, if the known and knower are not externally related, theories themselves, in being known, would be altered, and the knower would never know them as they actually are.

Additional Views Regarding the External Relation Between the Knower and the Known.—To E. B. Holt, the vice of subjectivism is that of trying to define simpler entities of being in terms of their more complex aggregates, wills, minds, or experiences. He makes the point that to define the component entities, which we experience, in terms of consciousness, experience, or mind is as unreasonable as to define laws in terms of government or carbon in terms of trees. Experience is definable in terms of the entities which make it up, but they are not definable in terms of experience. They, the constituents of experience, simply are.[28] W. P. Montague considers subjectivism a theory in which the figure of speech called metonymy assumes too important a rôle. "Metonomy" is the usage of one word to present the idea which ordinarily another word is employed to convey. According to Montague, the taking of *experiencing* to mean the same thing as *experienced* has resulted in the inference that the two are materially connected in nature. But, affirms Montague, the thing experienced does not depend upon the experiencing of it any more than a thing pointed at depends on the pointing at it.[29] Holt also believes that the identification of *being* with *being known* is due to the fact that we forget that connecting experience with things experienced is a metonymic figure of speech, and not a scientific statement of affairs.

The English new realist, S. Alexander, also contends for the thesis that the object is distinct from mind. Alexander argues

[27] *The New Rationalism*, p. 427. See also pp. 86, 210, 211.
[28] See *The Concept of Consciousness*, p. 79.
[29] *The New Realism*, p. 259.

as follows: Though the mind in experience is compresent with the things revealed, and enjoys itself in the contemplation of the things, always, however, the object is distinct from the contemplating mind, and independent of it. Because mind selects its object, the belief arises that the objects of mind are made by mind and that they would not exist except for mind. The inference, however, is erroneous. The object owes to mind only its being known. The qualities as known and the existence of the object are not the production of mind. Unlike Berkeley, who regarded ideas as reality, Alexander considers reality as ideas. But experience itself attests the fact that the object of knowledge has a distinct existence from the knowing mind. To appreciate this truth, man needs only to open his eyes and see.[30] Bertrand Russell, another English realistic thinker, also distinguishes between sensation as act and the sensible object of which we are aware in sensation. His theory of perspectives, expounded in *Scientific Method in Philosophy*, in its explanation of the correlation between private and public spaces, seeks to justify, without belief in a thing-in-itself, the externality of sense data. Even such things as "illusions of sense" are regarded as real objects known to us. Their seeming unreality is merely a case of abnormal connection between the objects of sense. In Chapter IV of *Problems of Philosophy* Russell supports the theory that experience has an objective reference and criticizes Berkeley for fallaciously confusing the thing apprehended with the act of apprehension.

The claims of the new realists, named above, are substantiated by John Laird in *A Study of Realism*. According to Laird, the "assumptions of realism are that knowledge is always the discovery of something; that anything discovered is distinct from and independent of the process of recognizing it: that nothing which is known is *therefore* mental except in the way of being selected by a mind: and that if any selected thing is mental or mentally tinged *de facto*, this circumstance does not

[30] See *Space, Time and Deity*, Vol. I, pp. 15, 16.

affect the kind or validity of our knowing it" (p. 18). Not only are things perceived, but also things remembered, expected, fancied, believed and valued are, in their essential nature, independent of a knowing mind. Laird's realism means the repudiation of all kinds of immediate knowledge which deny a distinction between the subject and the object of knowledge. Intuitionism and mysticism, therefore, are not regarded by Laird as ways of knowing. Furthermore, he is realistic in asserting that knowledge of a thing does not logically imply knowledge about all its conditions and connections. Laird's denunciation of the priority of the subjective mind follows from his acceptance of "logical pluralism" as the most feasible ontology of reality. (See pp. 146 *ff.*)

In *The Aims of Scientific Method* T. P. Nunn criticizes the notion that "relevance to purpose and action" is a mark of objectivity in the objects of thought. We are aware of the objectivity of objects before we are aware of their utility. He also criticizes the conception that "sameness for all" is a sign of objectivity. Objectivity of objects is recognized prior to the attainment of knowledge regarding their sameness for all. Experience itself brings awareness of the objectivity of the things known. In the objective world, for Nunn, physical existents, psychical existents and subsistents are all to be found. Objectivity is a character of things thought as well as of things perceived. In an article in the *Proceedings of the Aristotelian Society* (Vol. X, pp. 191 *ff.*), Nunn maintains that both primary and secondary qualities are really in material objects whether perceived or not; that they exist as perceived; and that sensation as mental and representative need not be postulated. Another realistic thinker, whose work, *The Concept of Nature*, protests against the epistemological bias, is A. N. Whitehead. Whitehead's book is not a treatment of the relation between the knower and the known, but it is related to the polemic against subjectivism because he believes that we can attend to reality for scientific purposes without regarding at all the nature of the knowing mind. Whitehead objects to the "bifurcation of reality" into two

systems, one of which, treating the entities of speculative physics, as electrons, presents objects that are never known, and the other of which, studying objects as known, is concerned with things that are not real.

Let us now turn to a few of the criticisms which are made of the new realist's offensive against subjectivism. How sound and how significant is the polemic of new realism against the idealist's use of the ego-centric predicament?

Replies to the New Realist's Refutation of Subjectivism.— The first answer, which the idealist would make to the criticism of the objectivist, is that idealism is not subjectivistic in its interpretation of being. Certainly foremost among the mentalists was Berkeley, and he surely did not hold that "to be is to be perceived" in the sense that the new realist asserts. The new realist seems to think that Berkeley starts out from the assumption that existence is constituted by mind, whereas Berkeley commences from the standpoint of empirical observation. The distinction which the Bishop makes between ideas and notions does not indicate that objects are, for him, dependent for their existence upon psychical being. The subjective idealist does not start with meaning, but with existence, and arrives at meaning, or the psychological feature, later. As C. I. Lewis points out, the new realist does not appreciate the fact that, in general, it is "more accurate to represent idealism as maintaining the essential *knowable* character of reality than to take it as holding that all reals are known."[31]

The new realist's assertion that there is reality apart from knowledge has not been proven true any more than the subjectivist's declaration that there is no reality apart from knowledge has been proven false. The realistic thesis that objects are independent of mind must remain a mere assumption. It is an assumption, of course, which no one can prove to be wrong, but who cares enough about entities outside of experience to raise up reasons to demonstrate their existence? Man has too many un-

[31] *The Journal of Philosophy*, Vol. X, p. 43.

solved problems regarding things that are in experience without paying attention to the nature of things that are outside of human knowledge. The new realist does describe consciousness in a way to convince one that experience has objective as well as subjective features, but the very objectivity would be sheer inference were not a state of consciousness present to sustain it. A criticism which C. A. Strong makes of G. E. Moore is in point here. Moore, Strong asserts, has succeeded in detaching the objects of perception, spatially, from perceptions of them, but he has not succeeded in detaching them temporally. He has proved their independence, but not their permanence. For Moore, notes Strong, banishes consciousness, the sole evidence of the existence of objects apart from consciousness.[32]

The most serious objections to the new realist's polemic against subjectivism are those which pertain to the doctrine of external relations which underlies his objectivistic standpoint. The defects of the theory that relations are external are weaknesses, however, which we must postpone for later consideration.

To conclude the discussion of the realistic attack against idealism as subjectivism, it can be asserted, as a general interpretative summary statement, that, to the new realist, the idealist is guilty of believing that feature of the internal relations theory which is known as the modification theory of relations. The exponent of subjectivism holds that terms in relation causally influence each other. This theory, however, denies, without disproving the externality of relations. Subjectivism follows immediately with the acceptance of the modification theory due to the overpowering influence of the propensity to yield to the fallacy of initial predication. The subjectivist declares not only that terms in the cognitive relation are causally connected, but that knowing is constitutive of objects known. As E. G. Spaulding complains, the possibility of functional relationships, as the relation of acceleration to time, is disregarded by the idealist in his investigation of the connection between the subject and

[32] *Mind, N.S.*, Vol. XIV, p. 174.

object of knowledge. The idealist, in the opinion of the new realist, aggravatingly fails to appreciate the fact that the modification theory rests on the external relations theory, as is illustrated in the dependence of the causal relationships between organs and processes upon the functional relationships with which physical chemistry is concerned.[33]

We are now ready to pass to a consideration of the new realist's objections to idealism as absolutistic.

IV. THE IMPERFECTIONS OF ABSOLUTISM

One sin leads to another, and the error which the idealist commits with respect to one aspect of the internal relations theory is followed by another with respect to the theory's second feature. This other phase of the internal relations theory is the postulate that terms in relation demand an underlying reality to mediate the relationship. As the internal relations theory, when dominated by the fallacy of exclusive particularity, produces subjectivism, similarly the internal relations theory, when dominated by the speculative dogma, results in absolutism. Subjectivism represents the motive to explain the *origin* of reality in terms of mind; absolutism represents the motive to explain the *nature* of reality in terms of mind. Absolutism comes not to destroy, but to fulfil subjectivism. It comes to declare that the universe is not only mental, but also unified—an organic whole, an absolute one.

The Speculative Dogma in Absolute Idealism.—The craving for unity, the acceptance of the underlying reality theory of relations and reverence for consciousness, all taken together, lead the idealist, as absolutist, to interpret the universe as being held in oneness by a mediating agency, which can be no less than a world-soul, or cosmical self. Reality is considered as systematic, and the system is held to be psychical in nature. Epistemologically, and with respect to finite knowers, absolute idealism may be called objective idealism, even a sort of realism,

[33] See *The New Rationalism*, p. 185.

but ontologically, the ultimate nature of things being considered, it is a psychism. To use the words of R. B. Perry, "the central conception of objective idealism, in other words, is the conception of a super-personal, or impersonal, logical consciousness. This consciousness conditions being; and its enactments are binding on the individual thinker as his 'objective' reality."[34]

The speculative ideal as manifested in absolute idealism is significant of the doctrine's religious aspect. The doctrine is not restricted, as is naturalism, to the desire that there shall be one principle of being, one Atlas-like substance. The demand is made by the absolute idealist that this ultimate reality be good. To quote from R. B. Perry's work again, "the terms of devotional mysticism—Spirit, Perfection, Eternity, Infinity—appear in the very letter of its discourse. . . . This absolutism is not merely monistic, as is naïve naturalism; but it is also normative in that its cosmic unity is the limit or standard of the activity of thought."[35] This is borne out by the fact that historically in the various systems of absolute idealism, the universal intellect, will or self has been identified with the God of theology. To Bertrand Russell, both pantheists in religion and monists in philosophy represent the mystical temper of mind. Both believe in the possibility of a way of knowing which may be called revelation, or insight or intuition, as contrasted with sense, reason and analysis, and both believe that there is behind the world of appearance a reality, which should be regarded with worshipful admiration. Let us pass to a survey of the criticisms which the new realist makes against the spirituality of monistic idealism.

The Irrational Mysticism of Absolute Idealism.—Bertrand Russell's polemic against idealistic theory of the absolutistic type is worthy of detailed discussion. The criticisms which he makes against the idealist's position are fully presented in his volume on *Mysticism and Logic*. To begin with, Russell finds idealism, as mystical, erroneous in trusting to intuition. Intuition

[34] *Present Philosophical Tendencies*, p. 135.
[35] *ibid.*, pp. 164, 166.

is at its best with "the older kinds of activity, which bring out our kinship with remote generations of animal and semihuman ancestors. . . . But philosophy is not one of the pursuits which illustrate our affinity with the past: it is a highly refined, highly civilized pursuit, demanding, for its success, a certain liberation from the life of instinct, and even, at times a certain aloofness from all mundane hopes and fears" (p. 18).

Again, according to Russell, the idealist, in denying plurality, is influenced by the mystical mood. In a state of intuitive experience common objects have a strange feeling of unreality and contact is lost with daily things. Absolutism in idealistic philosophy is the theory which is formulated to justify the view of reality revealed in mystical ecstasy. "The resulting logic has rendered most philosophers incapable of giving account of the world of science and daily life. If they had been anxious to give such an account, they would probably have discovered the errors of their logic; but most of them were less anxious to understand the world of science and daily life than to convict it of unreality in the interests of a super-sensible 'real' world" (p. 20).

Another error of mystical absolute idealism, according to Russell, is its fallacious conception of time. It is in the dilemma of denying the reality of time on the one hand, and of exaggerating the reality of time on the other. As mystical absolute idealism believes time to be unreal; as evolutionary, absolute idealism recognizes the reality of time by distinguishing between its parts. In an idealism like that of Hegel, in which the idea of progress is prominent, the future must necessarily be regarded as better than the past. Russell argues for the reality of time, but he declares that the attitude taken towards time should be impartial. Realization of the unimportance of time is, for him, the gate of wisdom. He admits the reality of time only in the sense that there is a place for logical and mathematical truths which are not swallowed up in the flux of evolution. It is possible to believe, however, for reasons stated later, that Russell saves

the eternality of truths by denying them access to the concrete realm of change where truths by all means ought to be.

In still another respect this author finds idealism defective in interpreting reality in terms of mysticism. The mystical emotion may reveal "the possibility of a nobler, happier, freer life than any that can otherwise be achieved. But it does not reveal anything about the non-human, or about the nature of the universe in general" (p. 28). In short, the idealist is egocentric and his theories, as mystical, "are the reflections of 'his' own emotions on other things, not part of the substance of things as they are in themselves" (p. 28). The retort which will probably come to the mind of the idealist, is that this criticism of Russell cannot be expected to carry weight, when Russell in his own philosophy is more interested in telling the characteristics of some logical world, that *is possible*, than he is concerned to describe the nature of the actual world that *is*.

Finally, Russell has an argument which presents idealism as self-refuting. This criticism is as follows: "If no partial truth is quite true this must apply to the partial truths which embody the monistic philosophy. But if these are not quite true, any deduction we make from them may depend upon their false aspect rather than their true one, and may therefore be erroneous. . . . In order to prove that there can be only one coherent whole, the theory is compelled to appeal to 'experience' which must consist in knowing particular truths, and thus requires a notion of truth that the monistic theory cannot admit."[36]

The Formalism of Absolutistic Theory.—In absolutism, thinks R. B. Perry, the speculative dogma has three different manifestations. They are the speculative errors of *formalism*, *equivocation* and *dogmatism*.[37] Let us notice first the weakness, which Perry entitles formalism.

The absolute idealist is formalistic in depending for the definition of his universal substance upon logical categories. Such categories, as relation, unity, coherence, are used to replace the

[36] *Proceedings of the Aristotelian Society*, 1906, p. 36.
[37] See *Present Philosophical Tendencies*, chap. VIII.

older psychological categories which the idealist now acknowledges were presumptuously forced upon nature. Formalism is the sacrifice of the sufficiency and richness of concrete objects to purely logical categories representative of generality. Idealism suffers from this defect, and, consequently, in proportion to the refinement of its logic, it loses its pragmatic value and fruitfulness of pertinence to life. For definite information, the idealists, who identify spirit or will with logical unity, must wait "until scientists, historians, and others discover what things really are."[38] "The 'eternity' or universality of value is thus conceived so formally, as not to affect the really significant moral and religious issues. Among the values for which men actually contend, Absolute Idealism guarantees the ultimate conservation of but one, the logical value of the world-order. The attempt to invest will with the universality of logic has led to the *reduction of will to logic*. But a will so conceived, while it may claim universality, must be insufficient and indeterminate with reference to life."[39] This criticism of Perry's would be more convincing if the new realist himself were not guilty of formalistically reducing the "qualitied" entities of reality to the lifeless elements of logic.

The Equivocal Character of Absolutism.—R. B. Perry finds the absolute idealist equivocal in trying to save his doctrine from the barren formalism which it acquired in its emancipation from psychologism. Equivocation results from the desire to save breadth and thickness at the same time. It is perpetrated when the absolute is endowed with ethical and theological character. Moral and religious consciousness, however, when made absolute, when made logically coextensive with totality, loses its true connotation. Religion and morality have significance only as applying to an environment in which individuals may find themselves in friendly or hostile relationships. Such relationships are not significant for a universal consciousness. The absolute defined by the logic of generality must "stand uncom-

[38] *ibid.*, p. 170.
[39] *ibid.*, p. 180.

mitted to any cause, the impartial creator and spectator of things as they are."[40] Perry's criticism that absolute idealism is given to equivocation hardly comes, however, with good grace from a new realist. New realism, as we shall later observe, does itself become equivocal in an attempt to transcend its formalism.

The Absolutist as Dogmatist.—The dogmatic feature of absolute idealism Perry finds in the postulate that truth can be interpreted only in terms of the whole, in terms of the ultimate ideal of cognitive consciousness. Reality is identified with an absolutely organized experience, self-fulfilling and self-fulfilled. Perry criticizes this theory of absolute coherence as being meaningless. "Suppose it be granted that all things must be related. There still remains the question: How far do these all-ramifying relations go toward defining the terms so related? . . . Grant that the world is some sort of a unity in variety, of permanence in change, and the alternatives still range from a vital unity to a loose aggregate."[41] Again, the doctrine of coherence, according to Perry, involves the error of believing that there is a negative element in knowledge, such as plurality, unrelatedness, incoherence or meaninglessness. But, argues Perry, "there is a negative cognitive element only in so far as I do *not* know, that is, am confused and unaware. The conditions of knowledge are fully satisfied when I know positively and clearly. And from this it is possible to infer only that things are precisely and determinately what they are—a conclusion which does not in the least support either Absolutism or Idealism."[42] Finally, in the view of Perry, the doctrine of coherence involves agnosticism, "the denial of positive knowledge and the substitution for it of an unrealized project. It encourages the sweeping condemnation of science, and an irresponsible and autocratic procedure in philosophy."[43]

R. B. Perry, in criticizing idealism as dogmatic because of its

[40] *Present Philosophical Tendencies*, p. 182.
[41] *ibid.*, p. 187.
[42] *ibid.*, p. 187.
[43] *ibid.*, p. 174.

coherence theory, useless in particular problems, is overlooking the idealistic doctrine of degrees of truth. Moreover, he is disregarding the fact that knowledge, which, according to the new realist, has particularity and precision, is not actually definite, but always possesses, as the pragmatist is eager to affirm, the aspect of intention and promise, an intimation of more inclusive knowledge yet to be learned. Then again, as A. O. Lovejoy tells us, the history of philosophy clearly refutes the notion that idealism has always been inspired by religiously speculative motives. The optimistic bias cannot be said to be inherent in idealistic theory so long as Protagoras, Hume, Mill, Schopenhauer and Bradley are numbered among the idealists or near idealists. Furthermore, philosophers, decidedly non-idealistic in their standpoint, have manifested the mystical bias, as for illustration, the Scotch realistic school or Dr. Martineau.[44]

Let us move on to another new realist's opinion of absolute idealism. What has E. G. Spaulding to say of the absolutist's position?

The Theory of an Underlying Reality in Absolutism.—Before stating E. G. Spaulding's criticisms of absolutism it may be well to summarize the interpretation he makes of the idealist's absolute.[45] To Spaulding, the absolute of the idealist is the mediator of all relations, uniter of all-inclusive self and not-self in the act and implications of knowledge. Objective idealism is considered by him as being established upon the laws of contradiction, that is, upon the principle that the existence of any term necessarily implies the existence of its contradictory. For every *a* there must be a *non-a*, *a* cannot be without a *non-a*, *a* implies *non-a*. A unity is necessitated because of the inseparability of *a* from *non-a*. Now this unity must be at a different level from *a* and *non-a*, since there are numerically two. It must be transcendent to or underlying both *a* and *non-a*. It must be distinct

[44] See *The Journal of Philosophy*, Vol. IX, p. 633.

[45] E. G. Spaulding's conception of absolutism appears in chap. XXVI, and throughout sec. iii of Part II of *The New Rationalism*.

from the level of manifoldness or plurality. Again, the underlying reality must be simple and not complex, since, if it were complex, its parts would require another reality to relate them, and so on indefinitely. Spaulding in his description of absolutism has analyzed in a novel fashion the movement historically known as dialectic.

The chief motive of objective idealism, according to Spaulding, is to find two terms which are inclusive enough to take in all positive fact. The two terms which are found to be all-inclusive are *knower* and *known*. The subject-object complex, or the self and other than self relation, is inclusive of all that is reality. Since the two terms in the complex imply all that is, the underlying reality mediating between them must be the absolute or universal *one*.

Logically the underlying reality theory argues as convincingly for materialism as idealism. The idealists describe the absolute as spiritual only because they, influenced by the speculative dogma and the error of exclusive particularity, interpret the universe in terms of the introspective features alone. The idealist, in the opinion of Spaulding, considers the universe as personal because he wants oneness, and selfhood is the only instance of unity he deems discoverable.

Let us now pass to the defects which E. G. Spaulding finds in absolute idealism. The weaknesses of the philosophy will, of course, be those incident to a belief in an underlying reality.

The Deficiencies of the Theory of a Mediating Substance.— In the first place, Spaulding finds that absolute idealism permits an infinite regress. If an underlying reality is necessary to mediate between two terms, then there must be another underlying reality to mediate the relationship between the first mediating substance and the terms it sustains in a complex. This second underlying reality in turn implies a third supporting entity, and so on in infinite series. Therefore, according to the idealistic dialectic, the ultimate underlying reality is never reached. This aspect of infinity to the absolute is acknowledged by the idealist, who explains the dynamic character of reality

in terms of a regressive universal one. The absolutist never apologizes for an infinite regress in his theory.

The new realist may seek to avoid the infinite regress, which the notion of the absolute necessitates, but he has a conception of relations which is no less speculative than the idealistic theory of relations. The new realist treats relations and terms as external to and independent of each other, but he brings them into connection just the same. The connection between the externally related entities of the new realist's world is effected by means of the generative and relating capacity of the items constituting the complexes. As we shall observe later, the new realist in his view of relations espouses a doctrine which suggests an animistic principle with which only a mystical thinker should have anything to do.

In the second place, according to E. G. Spaulding, the only inductive evidence for the underlying reality, namely, the concept, is not valid. To consider the concept as the underlying reality which mediates the relation between members of a class presupposes that the members are similar. Such a presupposition is legitimate only if the modification theory of relations is justifiable, that is, only if the related terms affect one another and so cause one another to be similar. "But this theory," claims Spaulding, "has been shown not to be universally valid. For it presupposes that terms, in order that they may be modified, must be *unmodified and yet related.* But such ultimate unmodified, non-complex terms might be absolutely different and still be related. Yet, if terms can be related and yet be wholly dissimilar, there is no *relation of similarity* that relates them."[46] This criticism of Spaulding's loses its force when one remembers that the concept in idealism is not the nominalistic class name standing for similar things, but a dynamic, concrete totality effecting unity in a world filled with dissimilarities.

In the third place, E. G. Spaulding criticizes idealism as absolutistic because it is searching for a mere mentionable. The

[46] *The New Rationalism,* p. 190.

quest for the absolute is the attempt to reach the *summum genus*. But a truly absolutistic *summum genus* is simply a name, for by the principle of classification of the traditional logic which idealism accepts, "*the genus cannot include itself as a species, or as an individual* of any of its own species." The absolute, as *summum genus*, satisfies the logic of absolutism, but it does not satisfy the personal desires of the absolutist. He not only wants numerical monism, but a monism which is rich in content. This criticism is another form of R. B. Perry's attack against absolutism as formalistic and equivocal. It represents the new realist's failure to appreciate the idealistic notion that the *summum genus* is not an abstract, logical formula, but a concrete universal, the very *entelechy* of the world.

The Epistemological Tone of Absolutism.—In the last analysis, as has already been intimated, the defects of the absolute idealist's philosophy, whether in its formalistic, equivocal, dogmatic or mystical aspects, are those which arise because of a subjectivistic bias. To the new realist, the serious objection to absolutism is not that the absolutist interprets reality in logical terms, but that the logical principles, which he employs in his interpretation, are regarded as the products of mind. This is S. Alexander's point when he remarks that the categories, being and non-being, could never be merged into the category of becoming, as in the logic of Hegel, if they were derived from things and not from thought. "If being were concrete being, something which has a place in the world of reality and not in the inventions of abstract thinking, the one thing which is more obviously true about it than another is that it is not identical with non-being, but different from it, that is, that it is not identical with the other but other than it."[47] According to Alexander, the idealist saves the possibility of synthesis by reducing the factors which unite to form a concrete entity to mere abstractions. "But how," he asks, "can bare abstract thoughts, abstractions as he allows them to be, combine or be combined to produce

[47] *Space, Time and Deity*, Vol. I, p. 203.

a concrete one?"[48] In the judgment of Alexander, the law of contradiction, so necessary to the logic of absolutism, is not even itself derivable from mind, but is derived from the nature of Space-Time, the stuff of which all things are made. In this contention Alexander is supported by the American new realist, E. B. Holt, who maintains in *The Concept of Consciousness* that the law of contradiction, like all laws for that matter, is a feature of the very nature of things.

The Reply of the Absolutist to the Charge of Speculative Subjectivism.—The answer of the objective idealist to the realistic criticism, that absolute idealism is epistemologically biased and falsificatory of reality as it truly is, is, as has been repeatedly suggested in the present section, that the new realist misunderstands idealistic philosophy altogether. The idealist will reply to the objection that his theory is abstract and irrelevant to actual existence by pointing out that the chief thinkers in the history of thought to emphasize the cosmical and concrete character of contradiction have been the idealists with their doctrine that dialectic is the essence of the real. The idealists have not in motive, at least, espoused a philosophy remote from experience. If any philosophical interpreters have tried more earnestly than all other thinkers to be true to all features of existence, those interpreters have been the defenders of the idealistic tradition. As R. P. Hawes points out: "Whatever may be said of other philosophies, it is the very essence of objective idealism to maintain contact with immediate experiences, and with the mediating experiences of science."[49] Finally, the idealist can retort to the new realist that, however formalistic ultimate nature is according to absolutism, it is even more formalistic in the subsistential realm which the realistic thinker believes to be basic.

The main pretext for hostilities, which the new realist finds in idealistic theory, is the claim, alleged to be made by idealists, that categories and laws of mind are legislated by the knowing

[48] *ibid.*, p. 203.
[49] *The Logic of Contemporary English Realism*, p. 44.

subject. To the proponent of new realism, these so-called mental forms are dictated to mind by the nature of things. Even the concepts upon which the ego-centric predicament is founded are declared to be dependent ultimately, not upon the self, but upon its object. Absolutism, objects the new realist, presupposes subjectivism, and subjectivism has for the support of its presuppositions a logically defective theory of knowledge. Modern idealism, therefore, being a union of subjectivism and absolutism, is a philosophy unfit to stand. To the new realist, no theory, however satisfying it may be from the standpoint of sentiment, should presume to claim permanence when its basic assumptions are false to facts. As an opponent of rival philosophies the new realist is quite "tough-minded." Whether or not his passion for facts cools when he leaves polemical criticism for positive construction is a question we shall be interested to answer in a future discussion.

From our examination of the fallacies in naturalistic and idealistic theories, let us proceed to a survey of the singularistic logic which the fallacies manifest. The investigation of the traditional logic will constitute an introduction to our inspection of the pluralistic logical standpoint of the new realist. As will be observed, the conflict between traditionalism and new realism, when interpreted in purely logical terms, becomes a strife between the logic of classes and the logic of relations. The following chapter is a critical presentation of the realistic thesis that the logic of relations is superior for philosophical purposes to the logic of classes.

CHAPTER III

SCRUPULOUS SCIENCE

THE PROCEDURE OF REALISTIC THEORY

As was emphasized in the first chapter of the present work, for the new realist the crucial question in philosophy is the problem of relations. Bertrand Russell indicates this plainly when he asserts that he would prefer to have his philosophy described as "logical atomism" rather than as "realism." Since the beginning of human reflection man has been aware of certain dualities, certain dyads, which betoken conflict and contradiction in the world. Questions as to whether reality is one or many, permanent or changing, mind or matter, good or evil, etc., have persistently presented themselves to his mind. In the opinion of the realistic thinker the traditional thinker has not answered these questions correctly. The philosopher of the past has recognized the fact that man is aware of contradictions, but he has not been cognizant of the fact that the contradictions are actually present in the world. Instead of viewing the world as it really is, a universe of pluralism, flux and imperfection, he has called these evidences of chaos the notions of the finite human mind, which only knows in part. Overcome by the speculative dogma and the ideal to have a perfect cosmos, the historical thinker has disposed of manyness and motion by relegating it to a realm of appearance. According to the new realist, the traditional philosopher has not dealt fairly with things palpably real to common sense. The verities of everyday experience have been shamefully slighted in a zeal for the eternal and universal One. The reason for this contempt for mundane facts is to be found, thinks the new realist, in the domination of Aristotelian logic in the thinking of the past. Or, to put it another

way, the new realist believes that the naturalists and idealists have been trying to be consistent with the internal theory of relations when the external theory of relations is the doctrine which truly represents reality.

I. THE DEBATE OVER RELATIONS

To the new realist, both naturalism and idealism have been guilty of bifurcating the world into a realm that is real and a realm that is appearance. The naturalist has made mind subsidiary to matter, and the idealist has made matter secondary to mind. But new realism is preeminently a protest against the division of being into reality and appearance as it is effected in idealistic theory. For it is in the doctrine of the idealist alone that a theory, daring to justify such a bifurcation, is to be found. Let us now examine this doctrine which the idealist uses to support his standpoint.

The Nature of the Theory of Internal Relations.—The idealist finds justification for his monistic position in the internal theory of relations. The idealistic philosophy, which most completely evinces the influence of this conception of relations, is objective idealism. The need of the internal theory in objective idealism is explained by the fact that this philosophy, a combination of subjectivism and absolutism, rests, as has been previously indicated, upon two assumptions. Subjectivism is built upon the notion that relations, infinitely complex, causally affect one another. This formulation of the internal theory of relations is back of the idealistic contention that knowing is constitutive of things known; it represents the argument for the priority of mind which the idealist develops from the egocentric predicament. Absolutism is founded upon the second notion of the internal theory, namely, the assumption that an underlying reality is necessary for mediating the relatedness of terms. This formulation of the internal theory is manifested in the conception of the absolute idealist that reality is one, all-inclusive being.

The internal theory of relations denies any reality to the finite or partial. Relations are regarded as presupposing quality, and quality as presupposing relations. Qualities are nothing without relations; relations are nothing without qualities. The universal one alone is considered real. To understand any feature of the universe we must understand all its interpenetrating parts. To use the words of H. H. Joachim, "to 'conceive' means for us to think out clearly and logically, to hold many elements together in a connection necessitated by their several contents. And to be 'conceivable' means to be a 'significant whole,' or a whole possessed of meaning for thought. A significant whole is such that all its constituent elements reciprocally involve one another, or reciprocally determine one another's being as contributory features in a single concrete meaning."[1] According to the internal theory, "all varieties of individual expression are thus subordinate to the unity of the whole. All differences amongst various ideas result from and are secondary to the very presence of one universal type of ideal meaning in all the realm of life. All appearance and isolation in finite beings, all fragmentariness of their finitude, these are indeed but aspects of the whole truth. The One is in all, and all are in One."[2] Again as F. H. Bradley asserts, "the Absolute is not many; there are no independent reals. The universe is one in this sense that its differences exist harmoniously within one whole, beyond which there is nothing."[3] According to Bradley, all finite entities are "appearance." They lack the power of self-maintenance. The things, which the new realist claims to be real, are not, for Bradley, reality. Qualities, relations, space, time, motion, change, causation, activity, objects, even human selfhood, all imply otherness, imperfection, contradiction. Inasmuch as that which is real must be an all-inclusive, harmonious whole these entities are no more than aspects of the truly real. The absolute reality is described differently by different objec-

[1] *The Nature of Truth*, p. 56.
[2] Josiah Royce, *The World and the Individual*, Series I, p. 394.
[3] *Appearance and Reality*, p. 142.

tive idealists. All are agreed, however, that the reality, which is individual, universal and perfect, is best defined in terms like Experience, Will, or Personality. Mind, in some form or other, seems to be the most adequate token of the only One.

The Subject-Predicate Logic.—The explanation of the success of idealistic monism is to be found, thinks the new realist, in the domination of subject-predicate logic. In the opinion of Bertrand Russell, the influence of syntax in the case of the Indo-European languages accounts for much of the interest in monistic philosophies. Since almost any proposition can be put into a form in which it has a subject and a predicate, united by a copula, it is natural to infer that every fact has a corresponding form, and consists in the possession of a quality by a substance.[4] This inference that reality itself has the character of a logical proposition involves a certain view of the world. Since, according to the logic of propositions, the subject can exist with or without the predicate, whereas the predicate cannot exist apart from the subject, such entities as relations, nuances, qualities, which in metaphysics are regarded as predicated of reality, cannot be considered as self-existent. Furthermore, since the world as a whole is the only being, which is independent of everything else and cannot, therefore, be designated as predicate, it is the perfect subject of the proposition which represents the real. As Bradley argues in his *Logic* (Book I, chaps. I and II), every proposition ascribes a predicate to reality, which is the only ultimate subject. In interpreting the universe in terms of subject-predicate logic the objective idealist is giving to the term, Absolute, the meaning which in the past was ascribed to the word, Substance. For substance traditionally has been the subject of many predicates, the constant core of a changing cosmos. It is not to be thought that the doctrine of substance and the subject-predicate logic are present only in monistic philosophies. Bertrand Russell wrote a volume on *The Philosophy of Leibnitz*, criticizing monadism as guilty of errors which result from an exclusive

[4] See *Contemporary British Philosophy*, p. 368.

adherence to the subject-predicate logic. In the main, however, new realists have chiefly attacked the doctrine of substance as it is supported in the theories of the neo-Hegelians. The moralistic and mystical implications, which the objective idealists find in the notion of substance, seem particularly to provoke the scientific new realist to polemical reply.

The New Realist's Opposition to the Internal Theory of Relations.—To the new realist, the assumption of the objective idealist that the world is a perfect individual is defective even from the standpoint of religious sentiment. It does argue for a universe that will satisfy man's aspiration for a complete and consistent cosmos. The absolute, however, in the opinion of the new realist, is merely a verbal perfection. Absolutism does deny the reality of error and evil, but the denial of their reality suggests that the absolute idealist attends more to optimistic faith than to observational fact. According to the pluralistic realist, the monistic idealist is lacking in moral courage and religious confidence. The absolutist contemplates a world of salvation when he ought to be conquering a world of sin. Calling trust in the absolute, which results either from fear or contempt of facts, *faith*, is giving the term a connotation not pleasing to those who believe faith to be the zeal for conquest which spurs man on to correct the wrongs in the actual, factual sphere.

The chief offense of absolute idealism, however, is not in its other-worldliness. In fact, as we shall observe later, the new realist himself becomes mystical when he interprets the nature of values. The gravest erroneous consequence of accepting the internal theory of relations is that many of the entities of science are falsified. Absolutism makes appearance of the very things which the scientist considers real. Science is primarily concerned with the properties, manifestations, activities and phenomena of the world's constituents. To regard these objectives of scientific inquiry as predicates and aspects that have, apart from the subject-substance which underlies them, no power of self-maintenance, robs the scientist of the assuring confidence that his discipline deals with things that really count. Science becomes a subsidiary

of metaphysics. The new realist, with his intense scientific interest, will not concede that a study, which takes space and time seriously, is a sub-division of a field of knowledge in which spatial and temporal considerations are secondary in the quest for truth. In answer to the internal theory of the absolute idealist and in support of the thesis that finite parts have reality, the new realist presents his logical doctrine that relations are external.

The Nature of the External Theory of Relations.—This logical theory admits that the subject-predicate logic interprets the character of some features of the world. For instance, in an organism the new realist is willing to acknowledge that certain activities are dependent upon the organism as a whole. What the new realist denies is the contention of the absolutist that the logic of classes is the most important type of logic. The assumption of the monistic idealist that the subject-predicate logic is significant of the nature of reality as a whole is a case of unwarranted dogmatism. In other words, the new realist insists that there are many things in the world that cannot truly be conceived as being the attributes or relations of substances, or substance. The theory of the new realist, often called *logical atomism* or *absolute pluralism* (terms suggested by Bertrand Russell), is the doctrine that relations are not grounded in the nature of their terms. Indeed, relations have not terms for which they have a necessary attachment. Relations are independent of terms, and terms can pass in and out of relations without being modified in any way. For the new realist, when a scientist analyzes change, time, motion and such terms he not only attends to certain static features or to the fact that certain static features are related to other static features in a certain way; he also notices "the *relations between them*, which are as truly parts of the entity analyzed as are the elementary terms. For example, if we analyze time into terms (called 'instants') related to one another in certain ways (called, let us say, 'before' and 'after'), this means we actually find this to be the constitution of time and we find these relations there as truly as we do the instants. Did we leave these relations out, of course, the analysis would

falsify by ignoring an essential aspect of real time."[5] William James, a pragmatist whose ontology is as pluralistic as that of any realist, affirms the reality of relations as follows: "Prepositions, copulas, and conjunctions, 'is,' 'isn't,' 'then,' 'before,' 'in,' 'on,' 'beside,' 'between,' 'next,' 'like,' 'unlike,' 'as,' 'but,' flower out of the stream of pure experience, the stream of concretes or the sensational stream as naturally as nouns and adjectives do, and they melt into it again as fluidly when we apply them to a new portion of the stream."[6] "*As science progresses, the relations between things and between the properties of things are not only noticed but become actually the chief and even the sole subject matter of the science.* For example, modern mathematics, physics and chemistry are made up almost exclusively of propositions not regarding things or the predicates of things but regarding terms and their relations. Moreover, when these sciences define things, they do so by asserting of the thing not some predicate but certain unique relation to other things."[7] Science goes to a substance's predicates or relations to explain, rather than to the substance itself, because "whatever properties we ascribe to the substance in order to explain its predicates, have been previously borrowed by us from those very predicates."[8] Not being concerned with its religious import, the new realist finds the hypothesis of substance a barren abstraction. It explains nothing, and the new realist, as a scientific philosopher, desires above all things else to explain. The specific situations, in which the subject-predicate logic and the internal theory of relations prove inadequate, will be described later in our discussion of the mathematical arguments for external relations.

Since the new realist, in his theory that terms and terms, terms and relations, or relations and relations may be externally related to each other, speaks of these entities as being indepen-

[5] W. T. Marvin, *A First Book in Metaphysics*, p. 83.
[6] *A Pluralistic Universe*, p. 349.
[7] W. T. Marvin, *op. cit.*, p. 175.
[8] *ibid.*, p. 178.

dent of each other, it will be well to notice what the term, independence, means to him.

The Meaning of Independence in New Realism.—In the essay of R. B. Perry in *The New Realism* we find the realistic theory of independence clearly formulated. The interpretation of the term is preceded by an explanation of dependence. Dependence, according to Perry, is a notion which has the following meanings: Relation; Whole-part; Part-whole; Thing-attribute; Attribute-thing; Causation; Reciprocity; Implying; Being implied. These nine usages, when needless repetition is avoided, may be reduced to five main types of dependence: Relation; Whole-part; Exclusive causation; Implied; and Being exclusively implied. After defining dependence in terms of the characteristics just stated, Perry presents independence as the total absence of the features which dependence connotes. He is insistent that such a definition of independence does not mean that independence is non-relation. He believes that his conception of independence will eliminate three current mistakes which the opponents of new realism make in their idea of externality. In the first place, the definition of independence as non-dependence shows that the new realist does not intend to define reality in terms of its independence. Secondly, it makes plain that the new realist, in declaring that one thing depends upon another, does not assert that what is true of the one cannot be true of the other. In the third place, it proves that the new realist, in asserting that knowledge does not constitute an entity, may still believe that an entity known is, at least, in some sense different. A known entity is of course dependent upon knowledge as one of its parts.

Bertrand Russell, like Perry, objects to the notion that the external theory means non-relation. "If, when we say 'terms are independent of their relations,' we mean 'two terms which have a given relation would be the same if they did not have it,' that is obviously false; for, being what they are, they have the relation, and therefore whatever does not have the relation

is different."[9] For Russell, the doctrine of external relations is primarily this: "That a relational proposition is not, in general, logically equivalent formally to one or more subject-predicate propositions. Stated more precisely: Given a relational propositional function 'xRy,' it is not in general the case that we can find predicates α, β, γ, such that, for all values of x and y, xRy is equivalent to $x\alpha$, $y\beta$ $(x, y)\gamma$ (where (x, y) stands for the whole consisting of x and y), or to any one or two of these."[10]

The Epistemological Import of the Doctrine of External Relations.—As might be expected from the new realist's bitter polemic against mentalism, the external relations theory is applied by him to include the phenomenon of knowing. According to the new realist, the relation between objects and the knowing of them is not causal, but functional. It is a relation as external as that between motion and time. Not only concrete, particular entities, that is, existents, but also abstract entities, known as subsistents, are objective to and independent of the knowing mind for their being. All six authors of *The New Realism* assert the non-mental character of the propositions of logic and mathematics. As M. R. Cohen remarks, according to the standpoint of the cooperative volume of the American new realists, new realism seems to be more an attack against Berkeley's nominalism than against his subjectivism.[11] The English new realists, G. E. Moore and Bertrand Russell, also accept the objectivity of universals. To some realistic philosophers, notably the American new realists, E. G. Spaulding, W. P. Montague, W. P. Pitkin, and E. B. Holt, even illusions, errors, fancies, are independent of consciousness.

Although all new realists agree as to the independence of sense data and logical laws, they are not in accord as to the status of the values. S. Alexander, for example, holds a moderate realism with respect to distinctions of truth and error. Dependence upon consciousness is also asserted of the tertiary qualities,

[9] *Contemporary British Philosophy*, p. 372.
[10] *ibid.*, p. 373.
[11] See *The Journal of Philosophy*, Vol. X, p. 198.

truth, goodness and beauty. R. B. Perry takes a similar position regarding the relation of values to mind. He does not maintain that knowledge of a liking or aspiration constitutes value, but he does say that, the cognitive feature apart, the value occurs as determined by desire. He acknowledges without hesitancy that works of art, history, society, life, and reflective thought are dependent upon consciousness. Further on in the book we shall have occasion again to indicate the constitutive function that Alexander and Perry ascribe to mind in the value situation.

Not only are the contents of mind, traditionally thought subjective, considered objective in new realism, but even to cognition itself, as a process, the objectivity is attributed. This extreme aspect of independence is described in the following quotation from *The New Realism*: "The knowing . . . must take its place in one manifold with the things it knows. The difference between knower and known is like the differences between bodies, or states of consciousness, or colors, or any grouping of things whatsoever in the respect that they must be brought into one field of study, and observed in their mutual transactions. . . . In short, for realists, knowledge plays its part within an independent environment. When that environment is known it is brought into relations with some variety of agency or process, which is the knower. The knower, however, is homogeneous with the environment, belonging to one cosmos with it, as does an attracting mass, or physical organism, and may itself be known as the things it knows."[12]

We are now ready to observe upon what ground the new realist can justify his thesis that relations, even the relation of knowing, are external.

II. THE ANALYTICAL METHOD OF NEW REALISM

THE new realist finds his justification for the theory of external relations in the legitimacy of analysis, and his sanction for employing analysis in the validity of modern logic. Since all the realistic conceptions in philosophy and religion are depen-

[12] pp. 34, 35.

dent, as we shall notice respectively in Parts II and III of the present work, upon analytical procedure and recent logic, it will be well to examine, in some detail, these two factors in the new realist's program. The nature of analysis, as espoused by the new realist, will be considered first.

The Definition of Analysis.—Analysis, for the new realist, is "only the careful, systematic, and exhaustive examination of any topic of discourse."[13] It is the method of approaching reality in the attempt to discover whether the things deemed complex are reducible to simpler terms. "A neo-realist recognizes no ultimate immediacies nor non-relational nor indefinable entities, except the simples in which analysis terminates. . . . Such a course of procedure is fatal, not only to a mystical universalism in which the totality of things is resolved into a moment of ecstasy, but also to those more limited mysticisms in which complexes are regarded, despite the obvious manifoldness of their characters, as nevertheless fused and inarticulate."[14] Bertrand Russell describes analysis as "the substitution of piecemeal, detailed, and verifiable results for large untested generalities recommended only by a certain appeal to the imagination."[15] The direction of analysis is from the complex and concrete to the simple and abstract, with the purpose ultimately, asserts Russell, "to eliminate the particularity of the original subject-matter, and to confine our attention to the logical form of the facts concerned."[16] As the same author affirms in another work, analysis treats of things distributively, and with "such properties of all things as do not depend upon the accidental nature of the things that there happen to be, but are true of any possible world, independent of such facts as can only be discovered by our senses."[17]

[13] *The New Realism*, p. 24.
[14] *ibid.*, pp. 32, 33.
[15] *Scientific Method in Philosophy*, p. 14.
[16] *ibid.*, p. 185.
[17] *Mysticism and Logic*, p. 111.

The reducing of reality to logical form is the process of interpreting complex being into entities, which, in themselves, are void of qualities whether mental or material. Reduction to logic is emphatically not an interpretation of matter in terms of mind, or vice versa. It is a procedure which would divide reality until its ultimate entities are revealed in their true character, that is, as particles that merely are. As E. B. Holt puts it, the simple entities, of which in the last analysis all things are composed, have no substance. They are pure being, concept stuff, neutral stuff.[18] The standpoint of G. E. Moore is similar to that of Holt when the former asserts that the world must be reduced to concepts, that are not mental facts, nor any part of mental facts. According to Moore: "Existence is itself a concept; it is something which we mean; and the great body of propositions, in which existence is joined to other concepts or syntheses of concepts, are simply true or false according to the relations in which it stands to them."[19] To Moore, it is only when a thing is analyzed into its constituent concepts that it becomes intelligible. The world of diversity and materiality, which is generally taken as the starting point, is only derived. Intelligibility is possible because the propositions, constituted of the concepts reached by analysis, are not mental and therefore are capable of objectivistic investigation. S. Alexander also argues that the fundamental realm is concept stuff. According to this thinker, when an analytical approach is made towards reality, qualities and relations are always revealed as, in their simplest mode, spatio-temporal. They are configurations of Space-Time, the ultimate and, at the same time, the least concrete, feature of the world.[20]

The Various Types of Analyzable Reality.—E. G. Spaulding defends logical analysis against those who, holding to analysis as invention, as instrumental and constructive, maintain with Bergson or Bradley that analysis, as discovery, necessarily falsi-

[18] See *The Concept of Consciousness*, pp. 135, 136.
[19] *Mind*, Vol. VIII, p. 180.
[20] See *Space, Time and Deity*, Vol. I, pp. 336, 338, 346.

fies the real. He shows that analysis, as interpreted by the new realists, is not destructive when applied to the various wholes that are analyzable into parts. In his essay in *The New Realism* Spaulding presents the following as the different kinds of analyzable wholes: (1) Aggregates or collections of any number of objects in any order, in numerical conjunction; (2) Classes formed or composed of parts which are not classes, but which may be either organic wholes, or individuals, or simples, or collections. Thus the atoms of carbon, all electrons, the even integers, the rational fractions, are such wholes; (3) Classes formed or composed of subordinate classes—element number, integer, etc., which are subdivided respectively into the classes, monovalent and bivalent element, cardinal and ordinal number, odd and even integer; (4) Unities or organic wholes—any specific individual chemical compound existing at some particular space and time, any one organism, any one individual, molecule, or atom. In *The New Rationalism* Spaulding enumerates besides aggregates, classes and organic unities, series, specific complexes, functional wholes, contradictory, consistent and implicative wholes.

In the analysis of these types of wholes, three factors, declares Spaulding, are revealed: (1) Parts; (2) Relations which relate; (3) Properties, which, in some cases, the whole may have different from the parts. The first type of whole, the aggregate or collection, is analyzed by enumeration. The term, "and," represents the connection between entities in this complex. The entities connected are the parts of the complex. Spaulding treats relations which relate in discussing the analysis of classes, like number, space, time, motion, velocity, acceleration, dynamics, and duration. These have been considered unanalyzable, Spaulding believes, because analysis has been thought to break up space into non-extended points, time into time-less instants, and motion into a series of rests. The opponents of analysis have failed to take into account the organizing relations. Analysis of classes, like molecule, atom, electron, will also appear legitimate not only when parts and the organizing relations are taken

into account, but also when the properties of the whole which are different from the whole's parts and the relating relations are considered. According to Spaulding, the analysis of organic wholes has been considered falsificatory only because all three of the features which analysis discloses have not been noted. The recognition especially of properties of the whole, which are different from the properties of the parts, makes unnecessary the assumption of mysterious entelechies to explain the difference between organisms and inorganic complexes. Bertrand Russell acknowledges that analysis is faced with a difficulty in the case of unities from which it is free in the case of aggregates.[21]

The Technique of Analysis.—The method of analysis, whereby the constituent parts and properties of the different kinds of wholes are disclosed, is a kind that does not require any rendering asunder of the complex entities. It is conceptual analysis, a type of analysis which E. G. Spaulding calls *analysis in situ.* But if the procedure is not actual breaking down of a whole, it is virtually a method of elimination, since, one class being independent of another or other classes, it can be studied as if the other class or classes were not present. The chief service which analysis *in situ* renders is in case of the knowing situation. It here makes possible the distinction between the content and activity of thought and therefore enables the analytical new realist to show that the ego-centric predicament, though present, is not at all indicative, as idealists assert, of an internal relationship between objects and mind. Reenforcing and underlying his specific arguments for analysis as discovery is the telling point, "that all attacks on analysis are made by methods which themselves involve analysis or are analytical."[22] Otherwise they would be self-refutatory in the sense which we have already described materialism, positivism, subjectivism and absolutism to be in the opinion of this new realist.

W. T. Marvin discusses the type of analysis, which E. G.

[21] See *The Principles of Mathematics,* p. 141.
[22] See *The New Rationalism,* p. 160.

Spaulding calls analysis *in situ*, as follows: "To analyze what we perceive does not mean to take what we perceive to pieces. When I analyze the motion of a ball tossed in the air, or of a running horse, I do not stop the ball or the horse each instant to get a series of photographs, as it were. When I analyze the American flag into white stars in a blue field at one corner surrounded on two sides by thirteen red and white stripes in succession, I do not tear the flag to pieces. When I analyze an animal's body into its constituents, head, trunk, legs, tail, I do not butcher the animal. I simply *find* in the total complex, the unity, such and such constituents, thus and thus related. A flying projectile does go *through a path*, the shape of that path is a *parabola*, the projectile is in *different places* at *different times*, it is *there before* it is *here*. This I *see* or *find* without touching the ball, stopping the ball, or doing anything but looking sharply."[23]

The Ultimates of Analytical Research.—The entities which analysis discloses are of two classes, existents and subsistents. An existent is physical, according to E. G. Spaulding, when it either has been, is now, or will be at or in a particular place at a particular time. A mental existent, being non-spatial, is an entity which either has been, is now, or will be at or in a particular time. Spaulding mentions as physical existents such entities as things, forces, energies, qualities, such as solidarity and elasticity, relations such as cause and effect, and events such as the flow of electrical currents. Things perceptible and entities inferred to explain things are both regarded as physical. Mental existents are those which are interpreted by empirical psychology as processes or events that occur at a certain specific time. Subsistents are entities which, in Spaulding's description, are experienced and self-consistent, but which lack the full quota of qualities possessed by existents. Among the qualities absent in subsistents are those which represent spatial and temporal localization. Subsistents are outside space and time. They cannot

[23] *A First Book in Metaphysics*, p. 77.

even be considered as mental, because such a conception presupposes the fallacious notion that consciousness is a substance, or container.[24]

Bertrand Russell also believes that there are two kinds of analytical ultimates, but he calls them respectively qualities and relations instead of existents and subsistents. To Russell, Bradleyan monism and Leibnitzian monadism have influenced philosophy because, due to lack of criticism, too much attention has been paid to one sort of universals, namely, the sort represented by adjectives and nouns, that is, existents. Those universals, named by verbs and propositions, subsistents, have been usually overlooked. In *The Problems of Philosophy* he argues that relations are just as real as qualities, and that, like qualities, they possess being which is independent of their being in any way apprehended by minds.[25] This acceptance by Russell of so-called mental facts as not necessarily related to consciousness is represented also in his treatment of the laws of logic, some facts of memory, spatial and temporal relations, and some facts of comparison, as hard data (data concerning whose being real doubts would be pathological), as entities capable of being objectivistically analyzed.

Enough has been said to indicate the main motives of analytical method. Let us pass on to a consideration of the logical theory upon which the process of analysis is based.

III. THE PRIORITY OF SYMBOLIC LOGIC

The logic upon which new realism rests its case for analysis and the theory of external relations is that of pure mathematics, or symbolic logic. What Pythagoreanism was to atomism and Platonism in ancient philosophy, realistic mathematical theory is to modern materialism and idealism. The term, symbolic

[24] See *The New Rationalism*, pp. 490, 491, 492.

[25] chap. ix.

logic, is more satisfactory than mathematical logic, because the scope of logic is greater than that of mathematics.[26]

The Relation of Symbolic Logic to Realistic Theory.—New realism, in grounding itself on symbolic logic, denies that logic is in any sense a science of thinking. Logic in using mathematical method deals with something more persistent than mere thought. The logic of the new realist, as mathematical, is the logic of being. Mathematical truths, of course, have been discovered by man, but man's discovery of them has not modified them in any way. This principle has a great significance in new realism's ontological, epistemological and theological doctrines.

[26] The following culled items summarize the development of symbolic logic in brief outline form: Aristotle, about 350 B.C., in the use of letters as terms in the syllogism; Viete, 1540-1603, in the use of constant symbols in arithmetic; Descartes, 1596-1650, in the idea of a universal mathematics; Leibnitz, 1646-1716, in his conception that all ideas are compounded of a very small number of simple ideas, which form the alphabet of human thoughts, a calculus rationcinator; Lambert, 1728-1777, in continuing the notions of Leibnitz and in suggesting the idea of powers to a relation; Holland, latter half of eighteenth century, in treating the logical classes in extension; De Morgan, 1806-1878, in laying the foundation of a logic of relations, in contributing the De Morgan formula idea of universe of discourse, and many new logical forms; Boole, 1815-1863, in devising a calculus to express the principles of reasoning or laws of thought; Jevons, 1835-1882, in simplifying Boole's algebra, in discovering the law of simplification; Pierce, 1839-1914, in introducing the illative relation "is contained in" or "implies," and in improving Boole's methods of applying logic to the problems of probability. Recent authorities on symbolic logic are: John Venn, Mrs. Ladd-Franklin, A. N. Whitehead, Bertrand Russell, Eugen Müller, Platon Poretsky, Josiah Royce, G. Frege, Louis Couturat, G. Peano, and H. MacColl. Boole has been called the father of symbolic logic, but, in the opinion of Russell, the credit of first recognizing the philosophical utility of symbolic logic should go to Frege and Peano. For expositions of symbolic logic, see C. I. Lewis, *Survey of Symbolic Logic*, and Louis Couturat, *The Algebra of Logic*. For historical discussion of the subject, see John Venn, *Symbolic Logic*. Helpful books for the study of mathematical theory are *The Continuum* by E. V. Huntington, *Fundamental Concepts of Algebra and Geometry* by J. W. Young, *Principles of Mathematics* by Bertrand Russell and *An Introduction to Mathematics* by A. N. Whitehead.

Again, in espousing symbolic logic, new realism necessarily holds that from some fundamental concepts, in fact, from two, namely, terms and relations, a theory of reality can be derived. Not only can a theory of reality be deduced from these ultimate entities, but from them, and the propositions, which they immediately constitute, reality itself emerges. This principle, that complex and concrete being can be derived from abstract logical nature, finds prominent application in the cosmological, axiological, and psychological theories of new realism.

The new realist is quick to admit the claims of symbolic logic, because it aids him in meeting two requirements which are made of any thinker who would support the externality of relations. In the first place, symbolic logic justifies belief in the reality of the ultimates, the indefinables, which analysis seeks to reach. In the second place, it justifies these basic elements in such a way as not to negate the validity of space, time and motion. The criticisms which the new realist makes against the older logic are based upon the contention that historically logical theory has reduced space, time and motion to appearance. If new realism is to vindicate itself, its logic must support conceptions which involve pluralism and at the same time avoid the antinomies and contradictions of traditional theory. The logic of new realism must provide foundations for doctrines in which discreteness is made compatible with unity without depriving the particulars of spatiality, temporality or motion. How symbolic logic furnishes new realism with an escape from the traditional difficulties is illustrated in the proofs which the new realist finds in mathematics for the externality of relations. The following are the main proofs which the new realist appropriates from symbolic logic for the substantiation of his doctrine: the argument of simple terms; the argument from asymmetrical relations; and the argument of the infinite continuum. Let us consider these evidences for the legitimacy of external relations.

The Argument of Simple Terms.—Bertrand Russell puts the argument of simple terms in this way: "A term *a* may have a relation to a term *b* without there being any constituent of *a*

corresponding to this relation. If this were false simple terms could have no relations, and therefore could not enter into complexes, hence every term would have to be infinitely complex."[27] In *Principles of Mathematics* (Vol. I, p. 448), Russell argues for simple terms by showing that relations are not modificatory. "In short," he asserts, "no relation ever modifies either of its terms. For if it holds between *A* and *B*, then it is between *A* and *B* that it holds, and to say that it modifies *A* and *B* is to say that it really holds between different terms *C* and *D*. To say that two terms which are related would be different if they were not related, is to say something perfectly barren; for if they were different they would be other, and it would not be the terms in question, but a different pair, that would be unrelated."

It must be admitted that Bertrand Russell is right when he affirms that treating relations as modificatory means that terms must be infinitely complex. The absolute idealist gladly acknowledges the situation, and develops his notion of the absolute accordingly. The absolute idealist, however, points out to the new realist that his treatment of relations as external and terms as independent does not escape an infinite process. If, for the idealist, terms are infinitely complex, it is equally true that, for the realist, relations have the same character. The following argument of F. H. Bradley will bear out this point: "Let us abstain from making the relation an attribute of the related, and let us make it more or less independent: 'there is a relation *C*, in which *A* and *B* stand; and it appears with both of them.' But here again we have made no progress. The relation *C* has been admitted different from *A* and *B*, and no longer is predicated of them. Something, however, seems to be said of this relation *C*, and said, again, of *A* and *B*. And this something is not to be the ascription of one to the other. If so, it would appear to be another relation, *D*, in which *C*, on the one side, and, on the other side, *A* and *B*, stand. But such a makeshift leads at once to infinite process. The new relation *D* can be predicated in no

[27] *The Journal of Philosophy*, VIII, pp. 158, 159.

way of *C*, or of *A* and *B*; and hence we must have recourse to a fresh relation, *E*, which comes between *D* and whatever we had before. But this must lead to another, *F*, and so on, indefinitely. Thus the problem is not solved by taking relations as independently real."[28]

In the realm of logical dialectic the theory of simple terms and the doctrine of complex terms seem to have about equal validity, but in the sphere of concrete events the latter conception appears to have the advantage. When applied to the world of physics and flesh the notion of simple terms proves either false or futile. For, as Edmund H. Hollands points out,[29] if terms are definable, they are not simple, and if they are indefinable, they have no connotation nor causal power and cannot explain the actual world. J. A. Leighton, like Hollands, finds that the argument of simple terms is beset with a dilemmatic difficulty. To Leighton, it either supports chaotic pluralism, which is not truly interpretative of empirical reality, or it leads to an abstract monism, which, treating reality as super-rational, destroys the possibility of understanding or acting in the world.[30] One thing is certain, if terms and relations are both simple the universe is not a universe, but an aggregate. The relations do not relate; external relations cannot relate. As May Sinclair asserts: "They are cut off from all possibility of relating, not only by an endless regress, fatal to their reality, but by their hard and cruel indifference to their terms at the start. They are only contemplated as relating."[31] To hold that a subsistential relation, neither of space nor time, can connect spatial and temporal existential terms is certainly to give speculation a place in philosophical thinking.

The Argument from Asymmetrical Relations.—The second argument presented by Bertrand Russell to justify belief in external relations is the fact that some relations are asymmet-

[28] *Appearance and Reality*, p. 21.
[29] See *The Journal of Philosophy*, XI, p. 468.
[30] See *Man and the Cosmos*, pp. 157, 158.
[31] *The New Idealism*, pp. 37, 38.

rical.[32] A relation is asymmetrical when, if it holds between *A* and *B*, it never holds between *B* and *A*. According to Russell, the actuality of asymmetrical relations makes impossible the theory that all propositions have the subject-predicate form. In Russell's opinion, quality, order, space, time and motion involve asymmetrical relations and, therefore, cannot be interpreted according to logic which treats all propositions after the manner of Aristotle. It is impossible, believes Russell, to reduce, for example, such relations as before and after, greater and less, etc., to properties. His argument, stated in *Scientific Method in Philosophy* (p. 49), is as follows: "When, for example, two things are merely known to be unequal, without our knowing which is greater, we may say that the inequality results from their having different magnitudes, because inequality is a symmetrical relation, but to say that when one thing is greater than another, and not merely unequal to it, that means that they have different magnitudes, is formally incapable of explaining the facts. For if the other thing had been greater than the one, the magnitudes would also have been different, though the fact to be explained would not have been the same. Thus mere *difference* of magnitude is not *all* that is involved, since, if it were, there would be no difference between one thing being greater than another, and the other being greater than the one. We shall have to say that the one magnitude is *greater* than the other, and thus we shall have failed to get rid of the relation, 'greater.' "[33]

E. G. Spaulding points out a certain situation in which asymmetrical relations play a part in generating a type of being totally unexplainable from the standpoint of the subject-predi-

[32] See *Principles of Mathematics*, chap. XXVI.

[33] A. R. Schweitzer replies to the contention that asymmetrical relations are evidence of the externality of relations by arguing on mathematical grounds that asymmetrical relations are no more ultimate in mathematics than symmetrical, and that asymmetrical mathematical relations are explicable on an internal basis. (See *The Journal of Philosophy*, XI, pp. 175 *ff.*)

cate logic. This situation, in which the logic of classes proves inadequate, is the case of *series*.[34] A series is a whole in which similar terms are conjoined as in the logic of classes. In a series, however, the relation between terms is both asymmetrical and transitive. Asymmetrical relations have already been defined. They are relations such as always preclude the identity of the inverse with the original relation. For example, if *a* precedes *b*, it is precluded that *b* should precede *a*. Transitive relations are such that, if they hold between *a* and *b*, and between *b* and *c*, they also hold between *a* and *c*. Examples of transitive relations are "equality," "wider than," "ancestor of," and "before."[35] Important illustrations of series are space and time. The use of traditional logic in the interpretation of these two concepts has made unreal the notion of particular points of space and particular instants of time. The speculative desire to treat space and time as all-inclusive classes led traditional thinkers to neglect the importance of spatial and temporal elements which are finite and partial.

Another situation, with which the traditional logic does not adequately deal is the functional relationship. Inasmuch as a *function* is a *correlation between series*, and the logic of classes does not embrace the concept of series, this inadequacy of past logical theory is to be expected. In a functional relationship two series are related without the independence of either being negated. Instances of functional relationships are the relation between acceleration and time and the relation between the pressure of a gas and its temperature. The outstanding case of a functional relationship in realistic literature is the relation between experience as knower and experience as known. In the knowledge situation the new realist finds the most remarkable example of a relation between two series, each of which retains its own independent status. As has been remarked previously, it is in virtue of this fact, that experience is a functional rela-

[34] *The New Rationalism.*
[35] See *ibid.*, p. 191.

tionship, that the realistic philosopher finds the idealist's conclusions from the ego-centric predicament untenable.

The Argument from the Notions of the Infinite and the Continuum.—The third argument for external relations attempts to show that the theory of external relations does not deny the continuity of space and time in its insistence that finite spaces and times are real. It tries to indicate that it is possible to conceive the world as both many and one without reducing to mere appearance either of these two features of being. The new realist finds his grounds for such an interpretation of the world in the hypothesis that the universe is an infinite continuum. This means that he believes that reality is best described in terms of two mathematical concepts, the notion of the infinite and the notion of the continuum.[36] We shall notice other characteristics of a continuum, but let us observe first its nature as being infinite. We can call a continuum an infinite class, that is to say, we can describe it as a collection of individuals which has the nature of an infinite number. What, then, is an infinite number? An infinite number, according to Bertrand Russell, is a number that has reflexiveness and non-inductiveness. A number is said to be reflexive when it is not increased by adding 1 to it. This means that, given any infinite collection of objects, any finite number of objects can be added or taken away without increasing or decreasing the number of the collection.[37] By the non-inductiveness of an infinite number is meant that it has not the hereditary attribute, that is, its properties cannot be inferred by locating it in a series with definite properties. You cannot go step by step from a finite number to an infinite number. You can never reach an infinite number by counting. A

[36] These two concepts are treated philosophically by Bertrand Russell in *Principles of Mathematics*, Vol. I, chaps. XLII and XLIII. Towards the building up of a doctrine of the infinite and the continuum the presentations of Georg Cantor in *Grundlagen einer allgemeinen Mannigfaltigkeitslehre*, and *Acta Mathematica*, the theories of Gottlob Frege in *Begriffschrift* and *Grundgesetze der Arithmetik*, and conceptions of R. Dedekind in *Essays on Number* have also been contributory.

[37] See *Scientific Method in Philosophy*, p. 190.

class, therefore, which has an infinite number of members is one in which a part of the class can be put into one-to-one correspondence with the whole class. For example, "the points of a line an inch long can be put into one-to-one correspondence with the points of a line a foot long or a thousand miles long, and so these lines must be classes, or sets of infinite points."[38] According to Bertrand Russell and other new realists the paradoxes of motion are soluble at once when the truth of infinite numbers is appreciated. When it is recognized that in mathematics (and mathematics, thinks the new realist, should have a part in the explanation of the world) it is possible to conceive of the parts as having as many members as the whole, the famous old puzzles of Zeno can be solved. Take the case of Achilles and the tortoise. Achilles *can* overtake the tortoise because, mathematically, the distance travelled by the tortoise, even though shorter, contains as many points as does the distance covered by Achilles. For according to the conception of the infinite number, there is one-to-one correspondence between the terms which exist in a part and those that exist in a whole. A philosophy, that is mathematical rather than mystical, will not falsify, but validate the conclusions which even common-sense knows to be true.

The objections raised against the conception of the infinite number are similar to those levied against the argument of simple terms. Infinite numbers have legitimacy only in the realm of abstract logic. When the idea is applied to concrete reality it is useless as an abstract mysticism. It does not explain motion. For, as J. A. Leighton remarks,[39] according to the conception of infinite number neither Achilles nor the tortoise can reach the destination. The part of the course remaining to be covered by the runners after some of the distance has been run will contain as many points to pass as the complete course. In fact, as Leighton also suggests, according to the one-to-one correspondence theory the runners would never get into motion at all. As this critic of new realism affirms, the idea that an actual stretch

[38] W. T. Marvin, *A First Book in Metaphysics*, p. 234.
[39] See *Man and the Cosmos*, p. 483.

of space can be made up of innumerable dimensionless points and an actual interval of duration composed of innumerable durationless instants is an unintelligible conception. Infinitesimals in space and time are conceptual fictions, not concrete facts. As Leighton insists, the conception of a number, that is part of another number and yet equal in number to that number of which it is a part, is meaningless.

The continuum of mathematics is an *ordered*, *dense* class which satisfies *Dedekind's postulate.* Let us notice these three requirements of a class which is continuous.[40] The relation of order which a class may have is described as follows: Given a class C and a relation; let a, b, c be any elements of C. If $a \neq b$, then $a < b$ or $b < a$; if $a < b$, then $a \neq b$; and if $a < b$ and $b < c$, then $a < c$. A class is said to be dense, if, in addition to the three above assumptions of order, it satisfies the following assumption: If a and b are any two elements of C, there exists an element of C between a and b. Here is Dedekind's postulate: If C_1 and C_2 are any two non-empty sub-classes of an ordered class C, such that every element of C belongs either to C_1 or to C_2, and such that every element of C_1 precedes every element of C_2, then there exists an element X in C, such that every element which precedes X belongs to C_1 and every element which follows X belongs to C_2. In other words, there is an element X in C which actually brings about the division into two classes. It may be either the last element of C_1, or the first element of C_2. Very briefly defined, "the continuum is a series which has as one of its several properties that between any two members there is a third member."[41] The notion of the continuum does away with the concept of nextness, because between any two point-instants of space and time there is an infinite number of points and an infinite number of instants.

If reality were like a class which is a continuum then the world would be many and one at the same time. But, like the

[40] Our definitions are taken from Lectures VII and VIII of J. W. Young's *The Fundamental Concepts of Algebra and Geometry.*

[41] W. T. Marvin, *op. cit.*, p. 234.

notion of infinity, the idea of the continuum seems to have a validity which applies only in the realm of abstract mathematics. It suggests a conception of number, which has no expression in the realm of concrete affairs. "A number series that was an absolute continuum would be as senseless as a sand rope series; for the essence of every number series is that it is a discrete series.[42] According to J. S. Mackenzie, the notion of a continuous series is irrelevant to actual events. In the opinion of this philosopher, in the motion of concrete entities there is not continuity. All motion, he thinks, may be discontinuous. One thing is certain at any rate, namely, the apparently continuous phenomenon, a ray of light, is constituted of discrete waves.[43] The mathematical philosopher's notion of the continuum is open to another charge. It is doubtful whether a series can be truly continuous. A continuous series is a contradiction in terms. The new realist's contention that mathematical continuity is consistent with diversity is no more plausible than the idealist's theory that in the absolute there can be manyness. The continuous character of the continuum is only apparent. This is brought out by May Sinclair in her criticism that the relation of *betweenness* does not destroy the discreteness of terms. "If there is no betweenness you cannot shovel in your infinites," but "betweenness constitutes as definitive a gap as nextness. And for that matter, nextness is not avoided. To be sure, a definite A and B, or P and Q, V or W will no longer be next each other, but some indefinable point-instant x will be next *some* indefinite point-instant y, and by raising their number to infinity you have only multiplied nextness and discreteness."[44]

To the exponents of absolute idealism the theory of infinity is not necessary if its purpose is to avoid the contradictions of traditional idealistic doctrine. For, avers the absolute idealist,

[42] J. A. Leighton, *Man and the Cosmos*, p. 145.
[43] See *Elements of Constructive Philosophy*, p. 418.
[44] May Sinclair, *The New Idealism*, p. 159. In *A Defense of Idealism*, p. 228, the same author suggests several contradictions in the mathematical conception of infinity.

there is no contradiction discoverable when the key concept of absolute idealism is found to be "identity with difference," and not mere "identity," as the new realist mistakenly believes.[45]

To conclude our survey of the logic underlying analysis and to bring Part I of our book to an end, it seems necessary to say that the new realist, in proving the externality of relations, is as abstract as the absolutist in demonstrating their internality. Both become involved in the notorious antinomies of philosophy when they try to apply their logical abstractions to the concrete experiences of human selves. Both are guilty of falling prey to the error of exclusive particularity, and each suffers the penalties of a partial standpoint.

The new realist, however, is not indifferent to the fact that it is just as important for a philosophy to be true to life as it is for it to be true to logic. All the defenders of new realism recognize that philosophical theory must not be separated entirely from mundane matters. That their philosophy has ontological, cosmological, epistemological, theological, axiological and psychological features, as well as purely logical aspects, is indicative that new realism contains the formulation of a system and not merely the statement of a method.

Let us now turn to an investigation of realistic theory as a body of thought with philosophical and religious import. The chapters in the part immediately following discuss the philosophy of new realism. The chapters of Part III examine the doctrine's religious concepts.

[45] W. S. Gamertsfelder defends this point in *Thought, Existence and Reality*, pp. 14 *ff.*

PART TWO

NEW REALISM AND PHILOSOPHY

CHAPTER IV

ABSTRACT ATOMISM

THE ONTOLOGY OF NEW REALISM

New realism, as has been emphatically pointed out, has little use for the concepts of substance and cause. Their presence in theories of being is significant, thinks the new realist, of thought-destroying sentiment. The new realist, however, lives in the same world as the naturalist and the idealist, and must face the problems which these concepts have historically represented.

I. THE PROBLEM OF SUBSTANCE AND CAUSE

Substance, as a concept, has traditionally been of service in explanations of the unity in the world and in the individual. The concept, cause, has been useful in accounting for the continuity in the universe and in the human self. The problem of substance embraces the ontological questions regarding the persistent in reality, and the epistemological questions regarding the permanent in consciousness. The problem of cause comprises the cosmological questions regarding the evolution of reality and the epistemological questions regarding the proficiency of consciousness.

The new realist may declare that to attribute to reality or consciousness a definite qualitied nature, or a specified, efficient power, is fallacious procedure, but he cannot treat lightly the philosophical situations of which doctrines of substance and cause are attempted interpretations. However modern the new realist's method may be, the content of his theory will refer to issues which are as ancient as philosophy itself. Realism may be new, but reality is old.

How these great problems regarding the world and man are treated in new realism is the question to which from now on in the book our attention will be directed. The immediate chapter examines the ontological notion traditionally explained by the category of substance. The next chapter following discusses the cosmological problem historically interpreted by the category of cause. In the third chapter of the present part the new realist's interpretation of permanence and productivity, as these two concepts obtain in the specifically human realm, is considered. This consideration will constitute our examination of realistic epistemology. Let us now notice the solution of the ontological problem in new realism.

The Meaning of Substance to the New Realist.—If E. G. Spaulding may be considered to be the spokesman of general realistic theory on the question, the historical exploration for substance finds its commencement in the quest of the early Greeks for a core-like entity. To Spaulding, the interest of modern philosophy in substance is a continuation of the ancient search for φῦσις. The substantistic philosophies are the result of the domination of Aristotelian logic, a logic which, according to Spaulding, is "thingized."[1]

The difficulty which the new realist finds with the conception of substance lies in the fact that it is incompatible with his theory of analysis. An ontology which exalts the idea of substance has little place for the notion of many self-existent reals; it is likely to reduce the world to a numerical monism. An epistemology which emphasizes the doctrine of substance has small place for the idea of consciousness as one among many objective entities; it will probably consider consciousness as a container and external objects as its mental contents. The ontology and

[1] See *The New Rationalism*, p. 155. That Spaulding's contention is false is the opinion of J. A. Leighton in *Man and the Cosmos* (p. 187). Aristotelian logic is not based on the physical thing, insists Leighton, because, for Aristotle, substance is never a substrate. To the Stagirite, substance is individual being, a union of matter and form, and is not, in any sense, an underlying reality.

epistemology of new realism can only be the outcome of analytical method, whereas substance conceptions are the product of synthetic procedure. When we examine realistic philosophy to ascertain what theories regarding the nature of reality and the nature of knowledge are constructed on the basis of atomistic logic we find new realism's doctrine of neutral entities with its ontological and epistemological features. Our present concern is with neutral entities in the field of ontology.

II. THE ONTOLOGICAL DOCTRINE OF NEUTRAL ENTITIES

THE new realist is manifestly an ontologist. His passion to reach the ultimate of reality and his zeal to learn whether the ultimate is one or many betray his intense ontological interest. An objective and pluralistic theory may present ontological aspects as truly as does the doctrine of a subjective and singularistic philosopher. The new realist's interest in qualitative and quantitative statements regarding the character of the ontologically prior is displayed in his conception of neutral entities.

The Simplicity of Ontological Neutral Entities.—The conception of neutral entities in ontology is the theory that reality, as revealed in analysis, consists of simples that are in themselves neither matter nor mind. Material and mental connotations are not qualitative features of the ultimates, but are significant of the particular contexts in which the basic elements may occur. They cannot be explained in terms of any physical or psychical thing. In fact, they are indefinable. Definition demands a predication, ascription of attributes. The only quality which neutral entities possess is the one which even analysis cannot dissipate, namely, being, pure being, or mere *is-ness*. New realism is fatal to naturalism and idealism alike. Not in physics, not in psychology, but in logic is the true interpretation of reality to be found. For logic reveals the fundamental, qualityless elements, from which is derived all the concrete complexity known to empirical science.

The qualityless character of the basic level of reality receives good description in S. Alexander's conception of Space-Time.

To Alexander, "there is nothing simpler than Space-Time, and nothing beside it to which it might be compared by way of agreement or contrast."[2] The only characteristic which Space-Time has is that of being spatial-temporal, or motion. It is prior to all existents, but, being elementary, it has not their wealth of qualities. Space-Time is *a priori* and non-empirical, but this does not mean that the fundamental reality is not experienced. Alexander parts company, however, with the new realists who hold that logical entities are the prior features of the universe. Metaphysics, in the judgment of Alexander, should deal with the actual and not with a possible world. Mathematical method does not reveal the neutral. It is derived from it. Mathematical logic cannot, therefore, be entirely remote from concreteness, because it is dependent upon a fundamental realm, which, however qualityless it may be, is nevertheless experiential.

It is an unexpected aspect of the theory of neutral entities that the entities, though simple, are divided into two classes, logical elements and sense data. The two kinds of neutral entities correspond to the two kinds of ultimates of which analysis finds the world to be constituted, namely, subsistents and existents. The logical concepts, subsistents, are neutral because they have no connotative character at all. They are purely denotative. The facts of sense, existents, are neutral in the respect that they bear the two characteristics, psychicality and materiality, with strict impartiality. Existents are either mind or matter, depending upon the relational context in which they appear.

The realm of subsistents is really a world of indifference. Though identified by the new realist with the Platonic reals, the subsistential entities of new realism lack the richness and dynamic character of Plato's ideas. The procedure of the new realists in discriminating between terms and relations raises the question as to the validity of classifying into groups entities that are supposedly simple, and therefore devoid of differentiae. The difficulty is evidently one which is bound to appear when a

[2] *Space, Time and Deity*, Vol. I, p. 336.

philosopher wavers between the desire to be conceptually logical and therefore remote from experience as sensory, and the desire to be concretely ontological and therefore true to the facts of empirical existence. The neutral entities, which represent things more positive than logical elements, are discussed below in a treatment of new realism's epistemology. Our immediate interest is in the entities which are neutral in the sense of having no other quality than the lone one of being.

The Pluralistic Nature of the Realistic Ontological Realm.— New realism does not limit the field of entities that are simple to objects and relations of the physical and psychical spheres. In fact, new realism holds that the realm of subsistents is even more varied and extensive than the realm of concrete realities. To the new realist, the universe is a totality of all the entities of reality, the totality representing merely an additive sum of the externally related entities of reality. E. G. Spaulding would include as having a place in this subsistential realm such entities as perpetual motion, hypothetical substances like phlogiston, the snakes of delirium tremens, ghosts, centaurs, satyrs, future events, past happenings, particular objects, universal objects, apparently converging rails, bent sticks, motion, rest, space and time.[3] Whatever is content of any kind of awareness, perception, memory, dream, illusion, imagination, reason, intuition, may be regarded as a legitimate member of this ultimate, logical world. A subsistent, in other words, to use the definition of W. P. Montague, is "any one of the actual and possible objects of thought."[4] As Woodbridge Riley humorously asserts, the list of subsistents reads "like the selling list of a mail-order house where anything may be ordered from automobiles to tombstones."[5]

In German philosophical literature the realistic conception of a pluralistic world finds expression in Alexius Meinong's theory of objects, *Gegenstandstheorie*. According to Meinong, presentations, judgments and assumptions are all capable of having

[3] See *The New Rationalism*, chap. XLIV.
[4] *The New Realism*, p. 253.
[5] *American Thought*, p. 363.

"objects." The objects of these different forms of knowledge are independent of mind. All kinds of things, whether the result of mental or material processes, are *Gegenstände.* Not only empirical items, *Wirklichen*, but also the complex contents of rational thought, *Gegenstände höherer Ordnung*, have being apart from a knowing consciousness. Meinong, however, has three classes of objects instead of the two kinds found in American and English realism. Besides objects which exist, the data of sense perception, and objects which subsist, the data of mathematical reflection, Meinong presents objects that neither exist nor subsist. This third group, which most realistic writers include in the class of subsistents, contains false propositions, round squares and such entities. Facts, for Meinong, occur only in the two classes, existents and subsistents. Subsistential being is just as factual as reality that is existential. The chief difference is in the point that the former is timeless, while the latter is temporal. The distinction between the different kinds of entities of reality might be stated also in terms of *Sein* and *Sosein. Sein* refers to an object's existence or subsistence, that is, to its fact character, to its "thatness," to its "is-ness." *Sosein* refers to an object's "whatness," to its "is-so-and-so-ness." Objects which neither exist nor subsist may have *Sosein.* Meinong's doctrine that a theory of objects should treat objects irrespective of their factual character is, in import, the conception of Bertrand Russell, that philosophy, as logical, should treat possible and not merely actual being.[6]

The new realist realizes that pluralism, even when applied to conceptual entities only, has its weakness. Absolute pluralism, as surely as absolute singularism, is self-defeating. The new realist evinces his acknowledgment of this truth in his admission that propositions, which represent at least some singularistic character, may be as ultimate as terms and relations. A proposition implies parts, to be sure, but, on the other hand, the con-

[6] See *Ueber Gegenstandstheorien*, in *Untersuchungen zur Gegenstandstheorie und Psychologie* for A. Meinong's presentation of his doctrine of objects.

ception of parts presupposes the proposition, "There are parts." Even the proposition that propositions are not prior presupposes the priority of propositions, because it is itself a proposition. E. G. Spaulding and W. P. Montague, both of whom are pluralists, admit the possible ultimacy of propositions. S. Alexander, accepting the notion of subsistents as simple, objects outright to the idea that the subsistential realm is, even from the standpoint of conceptual logic, pluralistic. The Space-Time of Alexander is qualityless, but it is not many. It is the one, indivisible stuff of all things.

We have sufficiently indicated the nature of the subsistential *summum genus* of the new realist as ontologist. Let us suggest some criticisms which the realistic theory of being provokes.

III. THE SPECULATIVE CHARACTER OF REALISTIC ONTOLOGY

In spite of the new realist's hostility to speculation, his pluralistic ontology manifests the three forms of the speculative dogma, which R. B. Perry finds in singularistic absolutism. In other words, idealistic ontological theory is guilty of formalism, equivocation and dogmatism. Let us notice how these errors appear in realistic ontology.

The Fallacies of Logical Atomism.—The analysis of reality into simple units is a formalistic procedure as useless for practical purposes as the synthesis of reality into complex unity. To consider in ontology everything that can possibly occur in a proposition, true or false, is to make ontology a discipline not concerned with actual reality, but with contemplated absurdities, or even speculative nonsense. As James Lindsay puts it, commenting on the being of a centaur: "What has the logic of truth to do with a thing of this sort, which has no place in the world of reality?"[7] All things are conceptually possible, but not all things are concretely expedient. Mary W. Calkins speaks thus of the ultimate of realistic theory: "Such an extra-mental reality is indeed unknowable, since it by nature is unknown. Therefore,

[7] *Philosophical Review*, Vol. XXIX, p. 479.

the thinker can have no concern with it, and, of all people, the realist of today, whose fetish is logic, should eschew illicit commerce with the inconceivable and indefinable."[8] C. A. Richardson points out that it may be possible for a thing to exist which neither knows nor is known, "but that if such things should exist, they cannot be considered to be in any way akin either to subjects or to sense data."[9] In dealing with the realm of subsistents, realism is not realistic enough.

In order to account for concrete reality on the basis of abstract entities the new realist resorts to conceptions which betray the speculative fallacy known as equivocation. They endow the logical ultimates with positive character which their analytical method can never reveal as present. S. Alexander must grant motion to the supposedly qualityless Space-Time; E. B. Holt is obliged to ascribe generative power to his unqualitied neutral stuff; and E. G. Spaulding permits some of his subsistential elements to possess relating capacity. The new realist's explanation of evolution, however, is not a problem for present elaboration. We shall consider it later in our examination of realistic cosmology.

Dogmatism, in the last analysis, results because a thinker believes his theory to be the final interpretation, not only from the standpoint of truth, but also from the standpoint of human aspirations. That logical atomism has religious as well as scientific advantages is a property of the philosophy which well accounts for a certain dogmatic confidence on the part of new realists. Truly the notion of subsistential, externally related entities does not support a religious monism, but it does, nevertheless, disclose a motive markedly mystical. New realism is an illustration of the fact that the search for a cosmical ground is not peculiar to synthetic procedure. It may lead the thinker analytically to seek the many, as well as singularistically to search for the one. As Helen Huss Parkhurst asserts, the postulation of unitary, integral, essential wholes is indicative of a compelling

[8] *The Journal of Philosophy*, Vol. VIII, p. 454.
[9] *Spiritual Idealism*, p. 95.

force which is one of feeling rather than reason. To quote: "The notion of a universe of closed, self-contained, autonomous entities, impervious to change and destruction, such as the realist provides for himself, is one of the emotionally most comforting notions that is producible by metaphysics."[10] To J. A. Leighton, Bertrand Russell is a logical mystic, "who proclaims the joyous satisfactions of creating and contemplating the beautiful realm of clear and distinct, well-ordered, precise, and eternally stable, logical entities, in contrast with the heartless and confused world of brute matter."[11] As George Santayana remarks: "Mathematics seems to have a value for Mr. Russell akin to that of religion. It affords a sanctuary to which to flee from the world, a heaven suffused with a serene radiance and full of peculiar sweetness and consolation."[12] Again, as John Dewey points out: "It is impossible to force Mr. Bertrand Russell into any one of the pigeon-holes of the cabinet of conventional philosophic schools. But moral, or philosophical, motivation is obvious in his metaphysics when he says that mathematics takes us 'into the region of absolute necessity, to which not only the actual world but every possible world must conform.' "[13]

According to W. H. Sheldon, the search for logical ultimates reveals the tender-minded, semi-religious desire for peace, rest and security. Its great motive is that of intellectualism, which, for those who love personality, leads to a transcendent God; which, for those who worship the exactness of science, leads to modern logistic. Both God and logical ideas possess an aloofness from the concrete change and hurly-burly of life, which gives them worth and distinction as satisfiers of the intellectualistic interest of man.[14] The new realist replies to the accusation that he is influenced by the contemplative ideal by declaring that the independence and externality of his prior elements are not postu-

[10] *Recent Logical Realism*, p. 42.
[11] *Man and the Cosmos*, p. 12.
[12] *Winds of Doctrine*, p. 117.
[13] *Experience and Nature*, p. 57.
[14] See *The Strife of Systems and Productive Duality*, p. 224.

lated, but analytically revealed. But this answer is one which the absolute idealist can also present. It is a mistaken opinion for the new realist to hold that absolutism in idealism is an egocentric creation of fancy, and not an objective, dialectical interpretation of unity experienced actually in scientific, religious or social affairs.

The criticisms against realistic ontological theory may be summed up in the one criticism that new realism itself, in spite of its polemic against substantism, uses the concept of substance. The concept of substance, as J. A. Leighton points out, has been developed to satisfy two fundamental requirements of thought. The first demand is "for the notion of a permanent or enduring reality as the ultimate ground or subject of the ever-changing complexes of empirical qualities." The second demand is for "the notion of a self-subsistent or self-existent reality; of a reality which as self-existent or self-caused, is permanent."[15] The logical entities of new realism satisfy both of these requirements of substantistic thought.

Let us now pass from a consideration of logical entities as subsistential to an examination of the existential world of which subsistents are the constituent elements. How can the mathematical concepts of a static, non-spatial, non-temporal realm acccount for the changing world of space and time? How does the new realist, with his hostility to causational interpretation, solve the cosmological problem, historically explained by the category of cause?

[15] *Man and the Cosmos*, p. 189.

CHAPTER V

EMERGENT EVOLUTION

THE COSMOLOGY OF NEW REALISM

As the concept of substance may be regarded as having universal application in ontology, and particular reference in epistemology, so the concept of cause may be considered as possessing infinite and finite aspects. The new realist's view of the relation of cause to limited reality is discussed later in our treatment of realistic epistemology. The present chapter is concerned with the new realist's interpretation of cosmical phenomena, historically explained by the category of cause. The new realist, as cosmologist, treats the matter historically explained by the concept of cause in his evolutionary theory of creative synthesis. Whether or not the new realist's causational notions contain metaphysical character is a question which we shall be interested to notice.

I. THE DOCTRINE OF A GROWING WORLD

The cosmology, most acceptable to new realists today, is the doctrine that the world is an emergent reality. One of the chief exponents of the theory is C. Lloyd Morgan. Morgan is professionally a biologist rather than a philosopher, and cannot be called strictly a member of the realistic, philosophical school. A statement of his conceptions, however, will provide a satisfactory introduction to the cosmological theories of the new realists themselves. For Morgan, the development of the world is an emergent evolution. The notion of emergence implies that the universe is an evolution of the complex from the simple, a development of neutral, indefinable elements into rich and significant states of being. Reality is a pyramid of ascending levels.

The world is a hierarchy of consecutive systems, the succeeding always possessed of richer qualitative content than their predecessors. The most common names for these different systems are Matter, Life, Mind, and Deity. The doctrine is similar to the cosmology of either Plato or Leibnitz, but unlike the Platonic or Leibnitzian conception, the theory of emergent evolution has no place for entelechies, agencies, forces or powers that are spatially or temporally distinct from things moved or influenced. Morgan cites some of the earliest representatives of the standpoint.[1]

In the pyramid, which, for Morgan, represents the evolving world, the richest reality is at the apex. "Near its base is a swarm of atoms with relational structure and the quality we may call atomicity. Above this level, atoms combine to form new units, the distinguishing quality of which is molecularity; higher up, on one line of advance, are, let us say, crystals wherein atoms and molecules are grouped in new relations of which the expression is crystalline form; on another line of advance are organisms with a different kind of natural relations which give the quality of vitality; yet higher, a new kind of natural relatedness supervenes and to its expression the word 'mentality' may, under safeguard from journalistic abuse, be applied."[2] According to Morgan, God is the "Nisus directive of the course of events." Through his "Activity emergents emerge,

[1] See *Emergent Evolution*, Lecture I. According to Morgan, J. S. Mill treated the concept of emergence in his *Logic* under the discussion of "heteropathic laws" in causation; G. H. Lewes, who suggested the word, emergent, discussed the notion in his *Problems of Life and Mind*, 1875; W. Wundt supported the thesis in his *Introduction to Psychology* in his "principle of creative resultants"; Bergson elaborated the notion in *Creative Evolution*; and William McDougall employed the idea in dealing in his *Social Psychology* with the nature of the sentiments. Morgan himself regarded the theory of emergence with favor in 1894 when he discussed "Selective Synthesis in Evolution" in his *Introduction to Comparative Psychology*.

[2] *Emergent Evolution*, p. 35. This volume has been supplemented recently by another series of essays entitled *Life, Mind and Spirit*.

and the whole course of emergent evolution is directed." He is "the Creative Source of Evolution."[3] For Morgan, there is "one immanent Causality, of which the whole course of evolution affords diverse manifestations." In Morgan's opinion, "the concept of evolution, as epigenetic may be supplemented (not superseded) by the older philosophical concept of the progressive unfolding *sub specie temporis* of revelations of that activity which is universally enfolded *sub specie aeternitatis*."[4]

Among philosophers, professedly of the standpoint of new realism, the doctrine of emergent evolution finds elaborate expression in England in the metaphysics of S. Alexander. In American new realism it finds special statement in the theories of E. G. Spaulding and E. B. Holt. The general character of the English and American presentations of the emergence theory is the same, but the conception of Alexander is more closely related to idealistic monism than is the pluralistic interpretation of American proponents of the theory. We summarize the doctrines of the three new realists, just named, to indicate the outstanding features of the realistic cosmology.

Space-Time as the Field of the Evolutional Process.—S. Alexander does not, in ontology, reduce the world to mathematical or logical priority. Mathematics, for him, always deals with empirical reality. The universe is not divisible into entities that are real and those that are not real. All entities are real, because Space-Time, the all-inclusive evolving stuff, is real, real to the core. Space-Time, in spite of the fact that it is not merely conceptual subsistence, cannot, however, be said to exist. It does not exist; it is rather the totality of all that exists. It is an infinite given whole, and its elements are represented conceptually as point-instants or bare events. Space-Time is not matter. It is anterior to matter. Matter is a finite complex of Space-Time. Space-Time is like the ancient *hyle*—absolutely self-contained and the cause of itself. Existents are groupings of the point-instants in the spatial-temporal matrix. They are complexes of

[3] *ibid.*, pp. 34, 36, 89.
[4] *Contemporary British Philosophy*, p. 304.

motion, differentiated within the one all-containing and all-encompassing system of motion.[5]

Empirical existents possess two kinds of characters, according to Alexander,—those that are pervasive and those that are variable. The pervasive features are the categories; the variable aspects are the qualities.[6] The categories are the groundwork of all things empirical. "Nothing therefore but exhibits categorical features; nothing therefore but obeys the principles in which these features reappear in the form of judgments. Everything has being and is substance, every event has a cause, everything is related to something else, by way of quality or causality or difference or otherwise."[7] The categories are "the determinations of all things which arise within Space-Time, which is the matrix of things, the nurse of becoming."[8] They correspond to Kant's categories of experience. They are non-empirical, *a priori*, but, nevertheless knowable. They are universal, like the forms of Plato, and existents partake of them. Examples of the categories, recognized by Alexander, are identity, diversity, existence, universal, particular, individual, relation, order, substance, causality, reciprocity, quantity, intensity, whole and parts, and number.

It is in his conception of qualities that S. Alexander espouses the cosmology of emergence. "Time and Space, either of them, creates differences in the other or breaks it up."[9] The result of the internal discrepancy in Space-Time is the production of qualities. Time is the principle of motion and change. It is the soul of the movement, whose body is Space. Time, for Alexander as for Plato, is the moving image of eternity, but in Alexander's theory the adjective, "moving," connotes determining power, and not simply change of location. The qualities, arising out of the motion of Space-Time, emerge in orders or levels. "The

[5] See *Space, Time and Deity*, Vol. I, pp. 336 *ff*.
[6] See *ibid*., Vol. I, pp. 184, 186.
[7] *ibid*., Vol. I, p. 330.
[8] *ibid*., Vol. I, p. 331.
[9] *ibid*., Vol. II, p. 47.

emergence of a new quality from any level of existence means that at that level there comes into being a certain constellation or collocation of the motions belonging to that level, and possessing the quality appropriate to it, and this collocation possesses a new quality distinctive of the higher complex."[10] The higher emergent is based on a complexity of the lower existents; "thus life is a complex of material bodies and mind of living ones."[11] "At certain points in the history of things finites assume new empirical qualities which are distinctive of levels of existence, primary qualities, matter, secondary qualities, life mind. . . . The highest of these empirical qualities is mind or consciousness. . . . The only mind in the universe is those finites which are conscious. There are consequently minds in the universe, but no mind in general."[12] Deity is the next higher empirical quality than mind. Deity, being a quality, is variable, and "as the world grows in time, deity changes with it."[13] Deity is an empirical quality like mind or life, and is subject to the same law as other empirical qualities, and is to be succeeded by a still higher quality.

A feature of Alexander's theory, unlike the cosmology of the American exponents of emergence, is that values do not constitute a level as do qualities. For Alexander, value is not something already in things themselves. It is born with the art of appreciation, and is therefore dependent in part upon a subjective consciousness. Dependence upon mind does not deprive values of reality, however. They are real, because they are the combination of subjective mind and objective matter and both of these entities are real. Two realities, Alexander remarks, cannot be the begetters of unreality. C. Lloyd Morgan, a defender and expounder of emergent evolution who thinks very highly of Alexander's metaphysics, believes that Alexander does not give values the status they deserve. Morgan holds that there should

[10] *ibid.*, Vol. II, p. 45.
[11] *ibid.*, Vol. II, p. 70.
[12] *ibid.*, Vol. II, pp. 335, 336.
[13] *ibid.*, Vol. II, p. 348.

be a value-frame to reality, which would permit the notion that we do not make values, but are made by them.[14]

Evolution as the Effect of Generating Relations.—E. G. Spaulding distinguishes between universe and cosmos. The universe is the totality of all entities that make up a whole that is merely additive. The cosmos is a totality of entities that form a whole that is not merely additive, but constituted by relations that generate classes, series and the like. The universe and the cosmos taken together represent all of reality.[15] According to Spaulding, it is an empirical fact, that in the physical world parts are non-additively organized to form a whole. Furthermore, the whole has characteristics qualitatively different from those of the parts. The new properties are not reducible to the properties of the parts, nor can the parts be considered as causes of the novelties in the whole. This theory of reality as a continuous novelty-forming process is none other than the doctrine of emergence with its notion of levels. The cosmological development, according to Spaulding, is of such a nature that between any two levels in the emergent process there is no conflict. The higher and lower levels are not identical, but there is a correlation between the higher and lower stages, which makes possible the control and prediction of the higher by means of empirical investigation of the lower.[16]

Generative Neutral Stuff as the Source of Concrete Being.—E. B. Holt's doctrine of cosmology is presented primarily in his conception of the neutral mosaic.[17] The world represents a realm of neutral entities, graded in order of complexity. The development is an asymmetrical transition from simple, fundamental, abstract entities to entities complex, particular, concrete. Qualities can be defined in terms of entities that are not qualities; mass can be reduced to entities without mass. Holt is the most radical of all new realists in the reduction, without residue, of

[14] See *Contemporary British Philosophy*, p. 305.
[15] See *The New Rationalism*, p. 488.
[16] See *ibid.*, pp. 449, 450.
[17] See *The Concept of Consciousness*, chap. VIII.

qualitative to quantitative magnitudes. He does, however, admit the validity of some novelty to all qualities, as, for instance, in his acknowledgment that an admixture of red and yellow will result under certain conditions in producing more distinct qualities than the two originally given.[18]

The order of advance in the evolutionary system of E. B. Holt is as follows: Entities of logic, mathematics and algebra; the qualities; data of geometry, mechanics, physics, chemistry, engineering, geology, geography, physical geography, meteorology, and astronomy; subject matter of botany, agriculture, horticulture, physiological chemistry, materia medica, biology, anatomy, physiology, surgery, eugenics, paleontology, etc.; sciences of psychology, anthropology, political economy, government, ethnology, history and archeology; and finally data of esthetics, logic, ethics, and, perhaps, theology. The productivity of this system is explained by the theory that the fundamental logical propositions have intrinsic activity and generative power.

An unexpected feature of E. B. Holt's system is its idealistic character. The development tends towards unity, and with the continuation of the emergence the number of independent entities is reduced. The tendency, whether mathematical, physical or ideal entities be considered, is towards simpler forms. He suggests that possibly the universe is one neutral substance, which permits development into the more and more complex. His world is a single, infinite deductive system. The cosmos of Holt is in import, if not in name, the absolute of Hegel.

With the doctrines of S. Alexander, E. G. Spaulding and E. B. Holt now before us, let us consider some questions which arise as to the validity of their general cosmological doctrine.

II. THE SPECULATIVE NATURE OF REALISTIC COSMOLOGY

THE motive of the theory of creative synthesis, or emergence, is frankly objectivistic. It does distinctly represent the desire to interpret reality as prior to and independent of man. It does

[18] See *op. cit.*, p. 162.

indicate a serious attempt to present evolutionary theory without epistemological or anthropological bias. The criticisms which are possible against the new realist's cosmology pertain, therefore, to the principles and not to the purpose of the doctrine.

Realistic Cosmology as an Instance of Speculation.—The new realist, in his cosmological theory, perpetrates the same fallacies which he commits in his ontology. In trying to explain how the complex can be derived from the simple, the qualitied from bare being, he escapes the consequences of his fallacious formalism by equivocation, and then confirms his formalistic and equivocal notions by dogmatism. The unqualitied ultimates of new realism are too abstract and thin to constitute a rich and full reality without interpreting them as possessed, cosmologically, with character, which, logically, they do not contain. To modify logic for cosmological principles, however, is to follow the lead of speculation instead of the motive of science. To believe, as Holt does, that propositions generate things and that deduction dominates evolution is, declares G. Santayana, "prettly plainly an abuse of logic and a reversion to a Platonic sort of metaphysics."[19]

The new realists are in a dilemma. Either the Space-Time of S. Alexander (especially Time), the organizing relations of E. G. Spaulding, and the generating propositions of E. B. Holt are completely analyzable, or they are not. If they are reducible to mere being, then emergence is miraculous; if they represent features irreducible, new realism as a theory of reform, as a theory to demonstrate the efficiency of analysis, is not vindicated. The new realists are either naïve naturalists, and their theory is materialism in all but name, or they are substantistic in the sense of accounting for novelties by a vital principle, which means that their theory is idealism with a different title.

The Inevitable Antinomy in Conceptions of Cause.—The new realist decries the substantistic explanation of cause because it regards psychological feelings of effort as significant of dynamic powers in the world. Psychological experiences of activity, to the

[19] *The Journal of Philosophy*, Vol. II, p. 451.

new realist, are simply experiences which have not been analyzed to their simplest components. The substantist, on the other hand, considers the new realist's analysis of a teleological whole into mechanical parts as falsificatory. This difficulty is one which has always occurred when a theory has tried to define both the function and nature of cosmological causation. The antinomy is the one involved in the two approaches to the problems of causality, namely, the practical and the theoretical. When a doctrine takes the practical attitude, it assumes a pluralistic, empirical point of view; when it becomes theoretical, it takes the singularistic, rationalistic standpoint. If the notion of cause is to have a usefulness in science it must recognize sequences, discreteness, things which come before and things which come after. Correlation has no significance in a continuous system. On the other hand, if the notion of cause is to explain antecedents as determiners of consequents, there must be no gaps between them or causation becomes a miraculous relation. New realism's mathematical theory of infinity does not provide escape from this antinomy of cause. For neither mathematical continuity nor correlation can be used to interpret, practically or theoretically, a system in which the present contains something new, something never found in the past. As we try to show in Part III of the present work, an advancing world cannot be interpreted if logical and scientific categories are used to the complete exclusion of axiological and speculative criteria.

Before concluding our discussion of realistic cosmology, let us consider briefly another philosophy, which holds, with new realism, that the world is an ever-changing and ever-developing reality. This other doctrine, which maintains that the universe is a cosmos "with the lid off," is pragmatism. How are the conceptions of the pragmatists related to the notions of new realism?

III. THE RELATION OF PRAGMATISM TO NEW REALISM

Among the pragmatists in recent philosophy the names of Charles Peirce, John Dewey and William James of America,

F. C. S. Schiller of England, Henri Bergson of France, and Giovanni Papini of Italy stand out most prominently. This is not the place to examine fully the various pragmatic conceptions. It will be worth while, however, to indicate the different points of view held by the leading American pragmatists. To do this brief suggestions from Woodbridge Riley's *American Thought* (p. 281) will suffice: The "primitive" pragmatism of Peirce is "logical"; the "developed" pragmatism of Dewey is "instrumental"; the "radical" pragmatism of James is "temperamental." "The first tended to be solipsistic, to confine itself to the individual and his doubts; the second to be social, to pass over the barriers of self; the third to be transcendental, to leap beyond human barriers, to reach a pluralistic universe of higher powers, earth angels, world souls, with which man may have intercourse."

Resemblances between the Pragmatic and Realistic Philosophies.—To begin with, pragmatism and new realism are vigorous defenders of the importance of scientific procedure in philosophy. Both are hostile to the conception of a universal absolute, and both maintain that such speculative doctrine is the result of accepting the fallacious postulate that "to be is to be perceived." The grounds for polemic in the two cases are different, however, since the absolute, to the pragmatist, is primarily objectionable because it is futile, while, to the new realist, it is unsatisfactory because it is false. Besides this concerted drive against the absolute, the pragmatist and new realist have other views in common. They both believe in pluralism and its logical theory of external relations. They both maintain that the world is evolutionary with this divergence of opinion: the pragmatist, a Protagorean, accepts evolution without reservation; the new realist, a Pythagorean, believes that in the universe of change there are certain features, as the fundamental concepts of logic or morality, which do not vary. Finally, as to epistemology, the pragmatist and the new realist are in general agreement. The philosophies of both, by and in the large, espouse

neutral monism in their epistemological disciplines, with this possible difference, that the pragmatist tends to emphasize the subjective aspect of the neutral stuff, whereas the new realist is prone to give more prominence to the objective feature. In their interpretations of error, both philosophies insist upon its actuality, holding, in the main, that error is the failure of the self to define effectively the stimulus of knowledge. It must be indicated, however, that the new realist takes the problem of error right into a logical realm beyond the sphere of physics, which the pragmatist, as pragmatist, is not greatly concerned to consider.

Contrasts between the Notions of the Pragmatists and the New Realists.—Although pragmatism and new realism are decidedly scientific in motive, there is a difference in their interpretation of science as basic. The pragmatist uses the biological, psychological and social sciences as foundations for his interpretations; whereas the new realist resorts to mathematics and logic for the presuppositions of his reflections. This means, of course, that the pragmatist will be interested in vital being, temporal events and activity, while the new realist will be largely concerned with pure being, eternal verities and contemplation. Significant of the pragmatist's interest in personal psychology and the new realist's concern for impersonal logic is the fact that the former pays more attention to the subject of knowledge in epistemology, and the latter, more heed to the object of the knowing relation. The pragmatic standpoint is generally practical, melioristic and democratic; the realistic point of view is, for the most part, mystical, quietistic and aristocratic. The pragmatist, like the traditional positivist, would control the cosmos; the new realist would be content, like the historical idealist, simply to understand the universe. The situation between the two philosophies is fortunate, however, because the pragmatic doctrine permits indulgence in purely intellectualistic meditations, and the realistic theory, acceptance of the thesis that truth must be consequential.

Before bringing to an end our treatment of realistic cosmology brief comment ought to be made regarding the remarkable character of the doctrine. Creatively synthetic cosmology in general may well be described in words of praise which May Sinclair has for the theory of S. Alexander: It "is a great and very perfect system, close-linked, creating an almost perfect illusion of inevitableness, and, as a sheer piece of philosophic architecture, exquisite in its proportions. It is all one; solid block on solid block; no untidy excrescences that refuse to fall in line."[20] The philosophy of emergence represents the most novel interpretation of philosophy since the rise of Hegelianism, and the doctrine of Alexander especially the most original individual philosophical theory since the presentation of Hegel himself.

Postponing further interpretation or criticisms of realistic cosmology until Chapter VIII, where we discuss "progress" as the religious corollary of the doctrine of emergence, let us pass to a consideration of the new realist's epistemology. How does he dispose of the traditional notions of substance and cause when he explains the nature of knowledge?

[20] *The New Idealism*, p. 163.

CHAPTER VI

MATERIAL MIND

THE EPISTEMOLOGY OF NEW REALISM

NEXT to logic the chief discipline in realistic philosophy is epistemology. If the logical and epistemological discussions should be removed from the general mass of realistic literature, not much would remain from a quantitative standpoint for consideration. The ontology and cosmology of new realism may be regarded, in fact, as corollaries of the new realist's theory of knowledge. Ontology is an extension of the new realist's interest in the objective feature of experience; cosmology is a generalization of his interest in its subjective aspect. The new realist's ontological theory that the entities of being are pluralistic and permanent is a consequence of the new realist's conception of the content of experience. His cosmological theory that reality is creative and changing is a development of his interpretation of the activity side of experience.

I. THE NATURE OF NEUTRAL MONISM

SINCE, to the new realist, content and activity are regarded as externally related aspects of one experience, the epistemological theory which explains them is called neutral monism. In other words, experience is a single phenomenon, possessing the neutrality of being interpretable either from the standpoint of matter or mind. Matter is not regarded as more fundamental than mind, nor is mind, on the other hand, considered prior to matter. In stuff experience is neither physical nor mental. Its character as material or psychical depends not upon its inherent nature, but upon the relations which it bears to the contexts of experience at large. If it is considered as independent of knowing we have

the interpretation of experience traditionally regarded in terms of matter. If experience is considered in its connection with a knowing agent, who need not, however, be its constituter, we have the new realist's explanation of the reality historically called mind. Fundamentally, the substance of one is the same as the other, for both, ultimately, are logical in nature. The two-fold character of experience results from the fact that it may be interpreted either from the standpoint of physics or from the point of view of psychology. E. B. Holt describes the double aspect nature of experience as follows: "A mind or consciousness is a class or group of entities within the subsisting universe, as a physical object is another class or group. One entity or complex of entities can belong to two or more classes or groups at the same time, as one point can be the intersection of two or more lines; so that an entity can be an integral part of a physical object, of a mathematical manifold, the field of reality, and one or any number of consciousnesses at the same time."[1]

The Fundamental Concepts of Neutral Monism.—The character of neutral monism may be indicated further by defining the two concepts which may be regarded as the constituent notions of the theory. These two concepts are *independence* and *immanence*. The former represents the thesis that objects of knowledge depend not at all for their being upon being known. The idea of independence is significant of the new realist's denial of the validity of the argument from the ego-centric predicament. All the new realists are exponents of independence in the case of sense perception, but the concept does not receive universal support when it is applied to memory, images, illusions, volitions, products of imagination, and values. The severe polemic which the new realist wages against subjectivism, and his appropriating the title "new realism" for his philosophy are evidences, to be sure, that he is more concerned to show the independence of the objective from the subjective in experience rather than the independence of the subjective from the objec-

[1] *The New Realism*, pp. 372, 373.

tive. Nevertheless, it needs to be recognized that independence, as a concept in realistic theory, asserts the independence of psychology from physics to be as logically valid as the independence of physics from psychology.

The second constituent concept of neutral monism, namely, immanence, refers to the notion of new realism that when an object is perceived the object itself and not an idea or copy of it enters into the relationship which constitutes the perceptive situation. The doctrine is sometimes known as "the identity theory." According to this thesis, objects known are identical with the content of knowledge. Among the first of recent realistic writers to expound the theory that mind knows the real object and not a phenomenon was F. J. E. Woodbridge. "Physical objects just as much as personal histories may be objects in consciousness," Woodbridge declares. "Both are known; and to know the physical world does not convert it into autobiography."[2] For things to become conscious does not mean that they lose their spatiality. Consciousness is, for Woodbridge as for the new realists generally, a form of connection of objects, a relation between them, a relation which is neither modificatory nor constitutive. Woodbridge anticipated the now popular realistic term, compresence, by calling the consciousness relation "continuum." For the believer in the immanence of consciousness, ideas are different from other things in the world only in the sense that they represent things that happen to be known. Immanence in epistemology is counterpart of immanence in theology. As in theological doctrine the unitarian conception of direct contact with deity has partly replaced the notion of a mediator, so in epistemological theory the doctrine of direct compresence with the object of knowledge has in a measure taken the place of the conception that the epistemological knowledge is a phenomenon intermediating between the knower and the known.

The Divergent Epistemological Standpoints of the English

[2] *The Journal of Philosophy*, Vol. II, p. 125.

and American New Realists.—All the new realists are in accord with regard to the theory that objects themselves, and not copies of them, are directly perceived, but there is disagreement with respect to the status of consciousness itself. The English new realists are willing to reduce the content of mind to identity with the object, at least in perception, but they, claiming introspection to be valid, are insistent that this despoiling of mental content should not be considered destructive of mind as activity. The American new realists, behavioristically inclined, represent a more radical point of view. All of them eliminate mind either as act or content in perception, and some of them treat consciousness as a mere relation even in complex knowledge situations. Both the English and the American new realists hold that the mind selects, but the new realists of America interpret the selection in a more patently mechanistic fashion. The American new realists are partial to the interest in epistemology which traditionally has been presented in theories regarding the substance or content, of consciousness. The new realists of England prefer to investigate epistemological problems historically discussed in doctrines regarding consciousness as causality, or function.

In the doctrines of Bertrand Russell are found evidences of both English and American, the introspective and behavioristic, standpoints. His philosophical thought manifests a development from the belief that consciousness implies unique awareness of data with transcendentally objective grounds to the position that the mental is, at least in perception, identical with the self-existent physical object. In *The Problems of Philosophy* he is an agnostic dualist, believing on an instinctive basis that there must be some actual, though unknowable entity underlying sense data, and holding to the legitimacy of an inference regarding the reality of some knower to which data are presented. In *Scientific Method in Philosophy* and in *Mysticism and Logic* Russell swings to a more phenomenalistic attitude regarding the objects of sense, and contends that, though sense data are not physical, physical objects are series of sense data in different perspectives. Mind is still retained as existent and active, but a transcendental

ground for the world of physics is definitely disregarded. In *The Analysis of Mind* Russell becomes an out and out Humian phenomenalist with regard to the affairs of sensation. An extreme form of epistemological monism replaces his former dualism. The knower as an introspectively revealed entity or as the object of justifiable inference is replaced by the physiological self of the behaviorists. He does distinguish between the causes of sensations and images by asserting that, while both may be the result of physical stimulation, images may be aroused by mnemic causation, that is, by sensations and other images. The distinction, however, is not one which would permit one to say that, in *The Analysis of Mind*, Russell holds psychological causation to be less mechanical than physical causation. In the last analysis, mnemic causation, for Russell, is as physiologically determined as causation provocative of sense experience.

From our comment on the relation of Bertrand Russell's philosophy to new realism on both sides of the Atlantic, let us turn to an examination of the two national interpretations of realistic epistemology. The American standpoint will be considered first.

II. EXPERIENCE AS CONTENT OF KNOWLEDGE

To treat the realistic epistemological theory, which is uniquely American, is to present the doctrine that consciousness, or mind, is content. The notion is not merely that experience has content. To interpret experience in the sense of describing its contents would be to return to a statement of entities which, apart from knowing, make up the world. This interpretation of content has already been surveyed in our examination of the new realist's ontology. The idea with which we are now concerned is that experience is not the container of content, but is itself the content of experience. Experience is objective and can be cognized by the same methods of knowing which apply to other entities in a pluralistic world. In short, the American new realist accepts the thesis of behaviorism that experience is empirical and can be apprehended by the methods of physical science.

The Behavioristic Character of Realistic Epistemology in

America.—In American realistic epistemology, as in behavioristic psychology, concepts like consciousness, self, ego, spirit and will are declared to be futile verbiage. Not all American new realists, nor all behaviorists, deny the possibility of such entities, but all assert that they are philosophical notions which only encumber a scientific interpretation of man. The new realist holds with the behaviorist that the psychologist "is primarily an experimentalist and believes that many of the supposed problems of philosophy will, with increasing knowledge, resolve themselves into concrete laboratory problems."[3] To the behavioristic new realist "not only instincts, emotions and habits, but even ideas and aspirations are proclaimed predictable and controllable adjustments of the human organism to its environment. States of mind, traditionally thought to be unique immediacies, and conative impulses, historically regarded as indefinable ultimates, are considered analyzable data. No centrally initiated activities are recognized, and the processes of psychical coordination are deemed bodily movements, mechanically caused by peripheral determiners. Introspection is allowed, but it is vigorously denied that the method reveals anything besides bodily activity." The new realist, as behaviorist, would, in short, "reduce human activity to two factors, stimulus and response, and would interpret both of these factors in terms of empirical science."[4]

The identification of mind with matter by the American new realist is a development of a general theory of knowledge presented in Ernst Mach's theory of elements;[5] in Richard Avenarius' rejection of introjection;[6] and in William James' conception of pure experience.[7] All of these doctrines attempt to solve the problem of knowledge by showing that reality, in the last

[3] K. S. Lashley, *Psychological Review*, Vol. XXX, p. 238.

[4] Quotations are from a paper by the author in *The Journal of Religion*, Vol. IV, p. 348.

[5] *Analysis of Sensations*, translated by C. M. Williams.

[6] *Der menschliche Weltbegriff* and *Kritik der reinen Erfahrung.*

[7] *Essays in Radical Empiricism.*

analysis, is neither subjective nor objective. The "inner duplicity of experience" is a fiction and "the bifurcation of nature" a perverse notion. The objective and subjective are one. From a general description of American realistic epistemology, let us pass to some detailed observations regarding the neutrally monistic standpoint as it is manifested in the doctrines of two representative American new realists, R. B. Perry and E. B. Holt. The theory of each of these two new realists reveals a pronounced interest to depict experience, as content, in objectivistic and behavioristic terms.

Methods of Investigating Experience as Objective.—There are two modes of inquiry into the nature of mind, according to R. B. Perry. First, there is introspection, a method used by religious teachers and human psychologists, a method by which the investigator generalizes the nature of mind from an exclusive examination of his own. Secondly, there is observation, a method used by historians, sociologists, and comparative psychologists, a method according to which the mind is treated as lying in the open field of experience and is studied like the motions of the stars. The two modes are supplementary one to the other, and both together take account of the whole mind. They represent, as it were, two aspects of one shield. Both methods must take into consideration consciousness as content, thought, percept, memory, and so on, and consciousness as action, thinking, perceiving, remembering, and so on.[8] Let us inspect the two ways which Perry presents as the approaches to mind.

Introspection as a Way of Objective Examination.—Introspection of consciousness as content yields, according to R. B. Perry, an identification and inventory of mental contents. It is reserved for the mind that originally had the experiences. The elements of the introspective manifold are themselves neither particularly mental nor peculiarly mind. Only their interrelation and pattern are peculiarly mind. Contents of mind coincide with contents of nature. It is important to show how parts of

[8] Our review of R. B. Perry's epistemology is based upon his theories in *Present Philosophical Tendencies*, chaps. XII and XIII.

nature become contents of mind, what determines their abridgment, what constitutes being in mind. The new realist, Perry acknowledges, must show what he means by his "form of connection," or bond of things mental. Question will arise in the idealist's mind, however, as to how the new realist can explain this "form of connection" without investing consciousness with more dynamic and influential properties than consciousness is conceived of possessing according to the identity theory.

Introspection of consciousness as activity has two forms in the theory of R. B. Perry—self-intuition of pure spiritual activity, and feeling of body action. That action of mind is revealed, as Berkeley believed, by immediate intuition is refuted by Hume and Bradley as an incident of the pseudo-simplicity error. Philosophy is peculiarly liable to this fallacy because of the extraordinary familiarity of the self. Self-consciousness is also discredited in the taking of habit for insight. Feeling of bodily action does not solve the problem of a unifying principle either, because the feeling of action belongs to the content of mind and cannot be the action by virtue of which things become content.

Observation as a Method of Empirically Studying Mind.—Observation of consciousness as content rests, in the judgment of R. B. Perry, upon the possibility of observing the contents of another mind. The notion of the impossibility of observation is a case of the fallacy of exclusive particularity, and represents the confusing of things inside and outside of the body. The difficulty of knowing certain aspects of another mind tends to be mistaken for the impossibility of such knowledge. We could, however, have no intercourse without such knowledge. You do follow my mind through verbal report, even though you know my mind indirectly and after hearing my words. Even the proprio-ceptive sensations of one person can be known by another. I alone, with my organism, can have these sensations, but you can know them because of similar instances in your own mind and because in studying my sensations you are not embarrassed by being cut or from extero-ceptive sensations so neces-

sary for knowledge of sensation. My purpose, opinion, desire, are least likely to escape you, but even my memory and abstract thought are such that you may know them.

Mind as a Dynamic Instrument of Adaptation.—The alleged impossibility of observing consciousness as activity is due, believes R. B. Perry, to the notion that mental action, to be observed, would have to become passive, and so lose its distinctive nature. Or, mental action is subject and so cannot, in the nature of things, be object. This objection rests on the error of exclusive particularity. Mental action is a property of the physical organism. The action of the nervous system is a function of the organism, and like the organism it exhibits the control of interest. The content of mind is that portion of the surrounding environment which is taken account of by the organism in serving its interests. Desire, as moral, as a form of determination, belongs not to the domestic mind, but to the mind at large in nature and society.

It is true that neither behavior, nor even conduct, is mind; but only because mind is behavior, or conduct, together with the objects which these employ and isolate. The environment is pre-existent and independent of consciousness. The actual objects are selected from a manifold of possibilities in obedience to the various exigencies of life. Subjectivity accounts for the possibility of error, but it does not itself constitute error. Error and truth arise from the practical discrepancy or harmony between subjective and physical manifolds. Whatever is true is that of which successful use can be made. Success and failure are determined by interest, means and circumstance. In his thesis that truth is the achievement, and error the risk, incidental to the adventure of knowledge with its environment, Perry reveals the pragmatic interest, which pervades his entire philosophy.

R. B. Perry acknowledges that introspection obscures the action factors of mind, and that observation is not wholly adequate in an investigation of mind as content. But when the results of these two ways of examining consciousness are employed together, the whole mind is presented, having a function

and structure that may be known by any knower. Perry, in his emphasis upon the immanence of consciousness, reduces mind as content to a meager, if not negative, status, but, like the English new realists, he does find some significance in the notion of consciousness as activity.

Let us now pass to the theory of an American new realist who is more radical still, depriving mind even of the right to be called activity. The philosopher who thus despoils mind of its traditional significances is E. B. Holt.

The Absolute Non-existence of Unique Mind.—E. B. Holt does not hesitate to declare his view that consciousness is objective through and through. He is probably more pronouncedly behavioristic than any present-day philosopher. As he puts it, "there is but one world, the objective, and that which we have hitherto not understood, have dubbed therefore the 'subjective' are the subtler workings of integrated objective mechanisms."[9] The most novel feature of Holt's theory is his notion of consciousness as a cross-section of the universe, selected by the nervous system. Consciousness is out there wherever the things specifically responded to are. Consciousness is not in the skull; it is not even within the nervous system. Consciousness is "like a searchlight which, by playing over a landscape and illuminating now this object and now that, thus defines a new collection of objects all of which are integral parts of the landscape (and remain so), although they have now gained membership in another manifold—the class of all objects on which the illumination falls."[10] The manifold is neither searchlight, nor object holding the searchlight. The cross-section, illuminated, is not inside the searchlight, nor are the objects that make up the cross-section in any wise dependent upon the searchlight for their substance or their being. The mechanism of response is the nervous system. Psychology is the science of the psychic cross-section; and not merely the science of introspection. Physiological psychology, which is a branch in

[9] *The Freudian Wish*, p. 93.

[10] *The New Realism*, p. 353; See *The Concept of Consciousness*, pp. 168-72.

the broadest sense of physiology, may justly claim to be the true and authoritative science of the soul.[11] Holt, like R. B. Perry, forestalls the charge of "materialism" by insisting that his basic stuff is not material, but logical or neutral.

According to E. B. Holt, if a sensation or idea represents anything else, whether this be an object or an absolute God's idea, it is so far identical therewith. There are no such things as knowledge and the object of knowledge, or thought and the thing thought of. The portion of the sky is my thought exactly as a portion of the sky is the zenith. Not only are sensation, perception, memory, imagination, considered objective, but even error and volition are regarded by Holt as independent of mind.

The Status of Error in Pan-Objectivism.—E. B. Holt admits that errors are not real, but he insists that this admission does not mean that he believes errors are not at all. Reality is a qualification of being, and to say that errors have no reality does not imply that they do not subsist. Error is a contradiction between propositions, and is an objective as is a collision between two physical entities. "All collisions between bodies, all interference between energies, all processes of warming and cooling, of electrically charging and discharging, of starting and stopping, of combining and separating, are processes of which one undoes the other. And they cannot be defined by the scientist except in propositions which manifestly contradict one another."[12] These existential discrepancies are possible in Holt's system, because, for him, subsistential realities, as contradictory, are generative of concrete being. True existences appear as the consequence of a consistency in the field of subsistents.

Some new realists interpret error as objective without giving it a subsistential status. For instance, W. B. Pitkin argues that error is not constituted by consciousness, but by the relations in which the seemingly subjective, erroneous factors stand. An error, for Pitkin is an entity which has more than temporal and spatial relations. The cognitive field, which error occupies, is the

[11] See *The Concept of Consciousness*, chap. xv.
[12] *ibid.*, p. 275.

$(4 + a)$th dimension. Pitkin believes, however, that this new dimension may be called physical just as validly as the other four orders, length, breadth, thickness and time. Error arises because two spatial things may occupy two levels, the spatio-temporal and spatio-temporal-cognitive sphere at the same time. The latter realm is called by Pitkin a projection of the former.[13] Bertrand Russell's position is similar to Pitkin's. Cognition is the name for certain relations of things in the physical world. Perceptions are certain appearances of physical objects. They are aspects of physical objects which are received by the nervous system. The physical object is a construction, pragmatic in its necessity, of the many aspects in which the sense datum, or possible sense datum may be known by one or more selves.[14] As a material object, to Russell, is a conventional grouping of sense perceptions, mind is a conventional collection of images. Error is not any more unreal than the facts of matter or mind. Error is constituted of perspectives just as truly as is a physical or psychical object; the only difference is that in error the system of the perspectives is not a customary or serviceable kind. S. Alexander denies that illusory appearances are the creations of mind. They are a part of the real world, but are "perspectives of the real world seen awry or squintingly. The world of illusions is the same as what we call the real world, but dislocated, its parts taken from their proper places and referred amiss. That dislocation is the mind's own work. . . . But it does not create but only rearranges what is already there."[15] The causes of the mind's false interpretations are manifold: Custom, interest of the moment, passion, prejudice, and physiological defects are some of the causes of error, according to Alexander. E. G. Spaulding, like Pitkin, Russell and Alexander, also regards error as "the 'taking' of one entity to be another that it is not, and the localizing of it in some time or place, one or both, or in some

[13] See *The New Realism*, pp. 443 *ff*.

[14] See *Our Knowledge of the External World*, chap. III, and *The Analysis of Mind*, chap. V.

[15] *Space, Time and Deity*, Vol. II, p. 216.

other universe of discourse, to which it does not belong."[16] That even a camera registers illusions is significant, thinks Spaulding, of the fact that erroneous perceptions, as for instance, converging parallel rails have not their locus in a substance-like consciousness.[17]

The Objectivity of Volition.—Volition, like all other processes traditionally explained as psychical, is, for E. B. Holt, wholly non-subjective.[18] Like R. B. Perry, Holt expounds volitions as purposes or desires which have their urgency in the very nature of reality. Volitions are impersonal and neutral. Volitions are like the laws of nature, propositions, and, like propositions, are active. The conations of personal, civic and social individualities are all reducible to subsistential forms, and their activity interpretable ultimately in terms of the dynamicity of logical being. S. Alexander's prolific Space-Time and E. G. Spaulding's creative synthesis doctrines are also significant of a volitional character to basic reality.

In according full ontological status to the things of thought and conation as well as to the things of sense, to subsistents as well as to existents, the new realist claims to be a Platonic realist.[19] The new realist is justified in this contention when only one standpoint in Plato's epistemology is taken into consideration. As W. Windelband points out: "Plato, as little as any of his predecessors, recognizes a creative activity of the consciousness, which produces its content."[20] From one way of considering Plato's theory, it must be recognized that Plato did believe that ideas are given to rather than made by the soul. From another point of view, however, the notion that mind is not constitutive of its content is hardly Platonic doctrine. In his later works, in the logical and dialectic dialogues, Plato is

[16] *The New Rationalism*, p. 429.
[17] See *ibid.*, p. 441.
[18] See *The Concept of Consciousness*, chap. XIV.
[19] See *The New Realism*, p. 35.
[20] *The History of Philosophy*, Tuft's translation, p. 119.

often as substantistic and instrumentalistic as a pragmatist in his conception of consciousness.

Criticisms of realistic epistemology arise at this point, but we shall postpone an estimate of the new realist's theory of knowledge until the epistemological doctrine of the English new realists is also surveyed. How do the new realists of England interpret consciousness? This is the question which now calls for our attention.

III. EXPERIENCE AS ACTIVITY IN KNOWLEDGE

As has already been intimated, the English new realists differ from the American exponents of new realism in that the former do not hold that the immanence of consciousness negates its transcendence. The English new realists are generally agreed that the realistic thesis of the independence of mind as content is valid, but they would allow to mind more activity or functional character than the American new realist conceives it to possess. Two English new realists will be considered as typical defenders of the English position, namely, G. E. Moore and S. Alexander.

Awareness as the Activity Aspect of Mind.—In the factor of awareness G. E. Moore believes that consciousness is discoverable as act. The factor is not regarded as substantistic, however. The relation of awareness to its object is not that of being substance to content, nor of part of content to another part of content. Awareness is to be simply aware of an awareness of an object, blue, or what not. The reason philosophies have not recognized this distinct conscious element is that it appears in introspection as mere emptiness, diaphanous. The discovery of awareness, according to Moore, is the consequence of true analysis. An analysis of a conscious situation reveals the objective feature, the sense datum, and the subjective portion, the awareness. The latter aspect alone is psychical.[21]

Enjoyment as the Mind's Active Character.—G. E. Moore's notion of awareness has an elaborate development in S. Alexander's theory of enjoyment. The following ideas, taken from

[21] See *Mind, N.S.*, Vol. XII, pp. 449 *ff.*

Space, Time and Deity, suggest the important features of the conception of Alexander: Any experience may be analyzed into two distinct elements, the act of mind, or awareness, and the object of which mind is aware. The relation between the two elements is that of compresence. Each of the two aspects is not only a part of a total experience, but can be experienced by itself. The consciousness, which the mind has of its awareness, is entitled enjoyment. Mind enjoys itself, and contemplates its objects. The contemplated object is non-mental, a part of the world of Space-Time separate from the apprehending mind. It gets into experience, not because mind constitutes its objects, but because mind is selective. Contemplated objects are not restricted to sensa. Images, even illusory appearances, as we have already stated, belong to the external world from which mind selects the objects which become for it cognitive experiences. The activity of mind is observable in the fact that experience is not only cognitive, but also conative. The conative aspect of the knowing situation, however, is lost sight of in the prominence which is given to the cognitive, or object-revealing, feature of knowledge.

Moore and Alexander undoubtedly have a place for mind, but the place is not one whose validity a psychology concerned to be objective can acknowledge. To call awareness self-evident or intuitive can hardly be called scientifically legitimate, when to a very important body of scientific persons the claims of self-evidence make no appeal whatsoever. Furthermore, awareness is so barren, so qualityless, that it does not suggest at all the dynamic, creative features always suggested by mind. It is as remote from actual experience as activity as the logical entities are remote from actual experience as content.

Moore's awareness of awareness and Alexander's enjoyment do represent consciousness as unique, but in Moore's awareness of object and Alexander's contemplation, mind is in no sense a relation uncommon. In fact, Alexander compares the cognitive relation with the relation of two compresent physical finites.[22]

[22] See *Space, Time and Deity*, Vol. II, pp. 82, 83.

At times, however, Alexander seems to shrink from treating consciousness as mere compresence, as is brought out especially in his criticism of Holt's cross-section theory.[23] This tendency to save mind involves him, however, in a difficulty when he tries to account for its uniqueness and still be true to his identification of psychosis with neurosis. Mental and neural processes are affirmed to be one, to be the same existence, and yet the mental is asserted to be more than the physiological.[24] This problem of consciousness as identical with and at the same time more than matter is another aspect of the theory of emergence already considered.

Before entering upon a criticism of American and English realistic epistemology let us notice how the problem of knowledge is discussed in German philosophical literature which manifests the standpoint of realism. We shall consider briefly the treatment of the body-mind problem which Oswald Kuelpe and Edmund Husserl respectively present.

German Realistic Epistemology.—Oswald Kuelpe's theory of knowledge is to be found in his works on *Die Realisierung.* Three volumes of the four planned for the discussion of his thesis have been published. The series as a whole is a treatment of the "placing" and "determination" of reality. The problem of "Die Realisierung," or *realization*, is, first, to postulate reality as having true being independent of the deliverances of sense and opinion, and, secondly, to obtain knowledge concerning the nature of the postulated real. Kuelpe criticizes *Konscienttialismus* as a point of view which denies the possibility of dealing with reality apart from consciousness. He objects to objective idealism because it denies that the real is an existent in its insistence that reality is a process. He agrees with the implication of objective idealism that the real is not merely the content of consciousness. Kuelpe does not reduce concepts, immediacies and abstractions to perceptual facts, as does the positivist, nor does he hold, with the mystic, that the data of sense are ulti-

[23] See *Space, Time and Deity*, Vol. II, p. 111.
[24] See *ibid.*, Vol. II, pp. 5 *ff.*

mately aspects of intellectual or mystical entities. In other words, like A. Meinong, whose ontology was briefly discussed in a previous chapter, Kuelpe believes that true being is pluralistic, and comprises elements that are conceptual and factors that are concrete. His theory of knowledge is a "universal epistemology," treating as the objectives of knowing the contents of consciousness recognized by subjectivism, absolutism and realism. Kuelpe, however, gives some constitutive power to the subjective self. In the "realization" of objects, some are apprehended as real, *Gegenstände;* others are apprehended subjectively as without reality, but nevertheless with actuality, *Wirklichkeit.* The reals are cognized by sense; the actualities (signs, concepts and abstractions) are cognized by thought. The actualities, though not out of mind as are the reals, are objective enough to be treated like the reals as objects of science. The science of the "Wirklichen Objecten" he calls *Idealwissenschaft*, "ideal science."

Edmund Husserl, in his doctrine that "phenomenology" is the fundamental science, develops a philosophy which, from the standpoint of epistemology, is realistic. Husserl believes that philosophy should have principles of its own. It should not simply be the explanation of facts given in empirical experience. Nor should it be merely a justification of knowledge acquired by intuition, tradition or prejudice. The American and English realists attempt to show that experience is, to an extent at least, independent of a psychological knower. Husserl would not only withdraw experience from its psychological connections; he would separate it from its physical and temporal relations as well. For Husserl, the true epistemology would be a consideration of the essential connections of vital experiences, *Erlebnisse.* He is concerned to study "pure consciousness." As he discusses his thesis in the *Ideen*[25] (Section 3), the fundamental kind of knowledge is the contemplation of essences, *Wesenerschauung.* This type of knowing, which is an intuitive sort of inspection

[25] "Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie" in *Jahrbuch für Philosophie und phänomenologische Forschung,* Vol. I, Part I.

(see Section 24), reveals universal judgments that are *a priori*, the unconditioned forms of all the different sciences. Phenomenology, therefore, is an "eidetic" science. Laws are not inductions; they are apodictic. They cannot be based solely upon the psychological processes of man.[26] Husserl deplores the skeptical and relativistic conception of laws which must result when they are regarded as grounded upon human calculations. (See Section 54). Phenomenology, as the descriptive ontology of pure consciousness, stands for the elimination, *Ausschaltung*, from consciousness of all existents. Existents are studied, but not as existents. They are studied as features of the vital experience. A bracketing *Einklammerung*, occurs which makes possible the inspection of consciousness as such apart from any relations it may have with the spatio-physical world, God, or the truths of mathematical or logical science. (See Sections 31, 59, 60.) The manner in which Husserl eliminates by "bracketing" all entities which are not the data of pure consciousness, is not unlike the process of analysis *in situ* used by E. G. Spaulding to observe the components of experience. The realism of Husserl, however, differs in one respect markedly from the new realism of America and England. Husserl does not espouse neutral monism in epistemology. According to the principles of phenomenology, the object of knowledge is not immanent in consciousness. Husserl agrees with Kuelpe in considering nature as the object of postulation, rather than as the content of immediate experience. In experience only adumbrations, outlines, *Abschattungen*, of existent reality appear. Objects and qualities of objects transcend the *Abschattungen*. This is the case whether the objects are objects of perception or imagination. The factors which transcend pure experience are phenomenal, uncertain. The entities of pure consciousness, that is, the immanent and the intuited, of which the transcendent objects are examples and by virtue of which the transcendent objects are known, are absolute and certain. (See Sections 44, 46.) Phenomenology is realistic in that

[26] See secs. 21-51 of the second revised edition of *Logische Untersuchungen*, Vol. I.

it does not regard individual objects as dependent upon psychological processes, but it is not realistic in making the physical subordinate to the realm of pure consciousness. Realistic in epistemology, phenomenology is idealistic in cosmology. Metaphysically, therefore, it is more closely akin to the neo-Thomistic realistic philosophy of Catholic doctrine than it is to the scientific theory of American or English realism. Of course, not all American and English new realists accept neutral monism as their epistemology, but it must be acknowledged that a philosopher who repudiates epistemological monism, is not a full-fledged member of the school of new realism.

IV. THE SPECULATIVE FEATURES OF NEUTRAL MONISM

No theory of knowledge since the beginning of philosophy has sought to be objective more vigorously than the epistemology of new realism. Nevertheless, its great advance in the scientific interpretation of mind notwithstanding, realistic epistemological doctrine does contain features reminiscent of traditional speculative procedure. Let us notice what some of these metaphysical features are.

The Formalism of Neutral Monism.—The pan-objectivism of the neutral monist is the result of a falsifying analysis of the knowing process. The method of the new realist, as epistemologist, is too intellectualistic. The affective and volitional aspects of consciousness are too much neglected. From the standpoint of conceptual analysis or analysis *in situ*, it may be possible to regard "warmth" as an entity independent of an experiencing subject, but "warmth" thus separated would not be "warmth" at all. It would be a qualityless concept, deprived of the pleasing and comforting properties actually associated with the experience of "warmth." The concepts of pleasure and pain may be objective and independent of the peculiar idiosyncrasies of individual knowers. Pleasure and pain, themselves, however, are intensely personal and private. We may not be skeptical towards the realistic contention that sensa, images, ideas, concepts, and logical laws are external, but common

sense, so authoritative generally even to the new realist, will not permit us the belief that affections and connotations are not, to a great extent, the intimate possessions of particular selves. R. B. Perry is aware of the danger of intellectualism in new realism, and does not hesitate to declare that "one who is knower is, in relation to objects, something else and more than their knower."[27] He frankly acknowledges that knowing may make a difference to objects known. His insistence is that it does not make "all the difference."

Common sense will not accede either to the assertion that error is objective. As a matter of fact, the new realists themselves are subjectivistic in their discussion of error. They bring in a medium, the responding organism with its limitations, to account for the distortions and duplications of perception. The new realist can no more be certain than the mentalist that he is perceiving the true reality, and not appearance, if he allows the physical, or physiological, apparatus a modifying influence in the knowing process. The new realist is evidently aware of this element of subjectivity in his epistemology, for, in the final analysis, he makes error logical, rather than physiological. To make error logical is to make it neither existential mind nor matter; it is to make it a subsistential concept. This procedure deprives error of subjectivity, but unfortunately it places error in a realm where it cannot be eradicated. Error ultimately becomes a feature of the basic logical realm, and the new realist, despite his polemics against absolutism, as a philosophy postulating necessary evil, becomes himself a defender of error as inevitable. The new realist in grounding error in the realm of subsistents, a level which to him is fundamental reality, establishes a philosophy no less provocative of skepticism and despair than an idealistic metaphysics in which error is an aspect of universal good.

Furthermore, the formalistic character of neutral monism is apparent in its futility even in situations of veridical psychological processes. To explain perception or conception in terms

[27] *The New Realism*, p. 135.

of psychical and material features that are aspects of a third reality is certainly not illuminating if the third is a logical entity whose only quality is pure being. Such a procedure would be the unprofitable one of interpreting that concerning which we have at least some knowledge by that regarding which we are completely ignorant. As W. P. Montague, himself a new realist, asserts: "An agnostic monism which defines the physical and psychical as the miraculously parallel attributes of manifestation of a substance or power whose nature is otherwise indefinable, solves no problems either scientific or metaphysical."[28]

Equivocation in Realistic Epistemology.—To escape from the barren formalism of making qualities, traditionally deemed subjective, mere subsistents, the new realist, in epistemology as in ontology, reverts to another speculative procedure, namely, equivocation. To save his logical propositions from becoming futile fictions he endows them, the false and the true, with generative power. In short, he reasserts the validity of an interpretation of reality which idealists, immemorial, have presented as the doctrine of dialectic. In form it may be different, but in function the abstract universal of new realism possesses the productivity of the concrete universal of absolute idealism. W. H. Sheldon suggests this same point when he states that the new realist, in consigning error to the class of subsistents, is guilty of the fault of the faculty psychologist who is able to interpret often only by invoking the occult thing called Reason.[29] A. O. Lovejoy is still more derogatory in criticizing the new realist for escaping subjectivism by employing the notion of subsistents. In an article in *The Journal of Philosophy* Lovejoy calls the attempt to explain dreams and hallucinations objectively primitive spiritism.[30] J. A. Leighton describes the equivocal procedure of the realistic epistemologist a "resort to a highly hypothetical and dubious circumlocution for an elementary *quale* of experience" and a "substituting for the empirical

[28] *ibid.*, pp. 275, 276.
[29] See *The Strife of Systems and Productive Duality*, p. 203.
[30] See Vol. VIII, p. 598.

characteristics of consciousness and the physical world a set of ghostly logical entities of neuter gender which, however, being endowed with a non-ghostly wriggle or crawl, can engender the complexes which ordinary mortals call mind and matter."[31]

The new realists, in their joy at being able to analyze *in situ* the act and content of mind forget that there is *in actu* no discreteness in consciousness. Experience, in reality, is a unity; the bifurcation into objective and subjective is only a conceptual and methodological device. The realistic theory of error results from dividing by logical abstraction what, for common sense, is one, and then hypostatizing the distinctions made. This criticism is not applicable, of course, to those who claim error is objective because everything is objective and consciousness is a non-entity. The objection which arises to the notion that mind, as subjective, is not, is one of principle. The pan-objectivistic new realist himself believes that scientific investigation must concern itself with all data. A datum, which is evident if anything in the world is evident, is our experience of consciousness as activity. The behavioristic new realist cannot disregard this item in his field of observation without being untrue to his policy of radical empiricism. As C. A. Richardson remarks, the fallacy of the new realist is that of assuming that because he, by his methods, cannot find the subject in knowledge, there is no subject in the knowing relation.[32] The new realist is guilty of an error he denounces in rival theories, namely, the fallacy of exclusive particularity.

If the new realist does not recognize the validity of an entity, which transcends the psychical and physical as changing phenomena, he cannot have a place in his epistemology for knowledge of past events or permanent principles. "What," asks J. A. Leighton, "becomes of time, without the continuity of some entity differing in character from the assemblage of things in space relations?" and "Without the consciousness of the self-

[31] *Man and the Cosmos*, p. 325.
[32] See *Proceedings of the Aristotelian Society*, 1920-21, p. 59.

persistence of the experiencing ego how is one to account for a present temporal belief in the non-temporal fact or principle."[33] This same author points out that the ego-less epistemology of neutral monism "fails to account for the feeling of difference between the contemplation of objects as a part of one's personal experiences (perceptions) and of objects as existing apart from one's personal experience (imagination)."[34]

The Neutral Monist as Dogmatist.—As a behaviorist in epistemology, the new realist is guilty of the speculative ideal in the form of dogmatism. In espousing the behavioristic theory of the stimulus of human action, the new realist, like the behaviorist, develops a doctrine which is none other than a metaphysical dogma regarding the world as a whole.[35]

To the behaviorist, the stimulating environment is a very complex affair. "Life presents stimuli in confusing combinations."[36] The stimulus of psychology is more complicated than it is in physiology. The behaviorist has "to investigate *all* the conditions that determine the social status of the individual in society."[37] J. B. Watson and A. P. Weiss purposely use the words, *situation* and *signal*, respectively, to indicate that the stimulus has social as well as physiological implication. Besides physiological and social aspects, the stimulus possesses physical features. Ultimately, it is to the wide science of physics that the behaviorist must go for the interpretation of the stimulating condition of psychological activity. To quote from an expositor of behaviorism, the stimulating environment, for the behaviorist, "as physics and chemistry teach us, is a complex of relatively stable physical units of mass and energy. The internal changes are merely redistributions of the physical energic streams, re-

[33] *Man and the Cosmos*, p. 325.
[34] *loc. cit.*
[35] This brief statement regarding the dogmatic character of behavioristic psychology is a partial résumé of an article on the religious implications of behaviorism in *The Journal of Religion*, Vol. IV, pp. 347 *ff.*
[36] J. B. Watson, *Psychology from the Standpoint of a Behaviorist*, p. 11.
[37] *loc. cit.*

leased by the environmental impingements, along the most permeable pathways."[38]

In spite of its scientific sound, this behavioristic extension of the stimulus to embrace the whole world represents the motive of speculative philosophy. The behaviorist, in his espousal of physics as the basis of his psychological interpretations, must assert that every electron-proton change in any particular aggregate redistributes the strains in the universe as a whole. In other words, he must support the internal theory that everything in the world makes a difference to everything else, a principle more precious to the singularist metaphysician than to the pluralistic scientist.

The new realist analyzes further than the behaviorist and has the realm of subsistents, rather than the level of electrons and protons as his ultimate sphere, but the motive of the realistic thinker is that of behaviorism's defender. In interpreting mind as an adaptation to the environment, or as a portion of environment selected by a nervous organism, or as an entity generated from basic logical elements, the new realist, no less than the behaviorist, strikingly exhibits what Bertrand Russell disparagingly calls "the system-maker's vanity."

New realism's ontological monism, as we have seen, represents an emotional bias, the yearning to rest in the realm of the eternal. New realism's epistemological monism is no less significant of a passionate desire, the eagerness to be busy in the democratic sphere of the temporal, to deal, not with logical entities, but with the stuffy matter of the mundane world. In the new realist's epistemology the Platonist becomes pragmatic, and logic surrenders to life. The speculative dogma may manifest itself in the love of work as well as the love of worship. Evidence of this practical motive is amply found in the prominence given to behavioristic notions in the epistemology of the new realist.

Because new realism, as an epistemological theory, ends up in naïve naturalism, a group of thinkers, who endorse whole-

[38] O. L. Reiser, *Psychological Review*, Vol. XXXVI, p. 68.

heartedly analytical method, have presented a doctrine which avoids the materialism of the new realist. These men are the critical realists, Durant Drake, A. O. Lovejoy, J. B. Pratt, A. K. Rogers, George Santayana, R. W. Sellars, and C. A. Strong, joint authors of *Essays in Critical Realism*. R. W. Sellars published a book with the title *Critical Realism*, in 1916, the year when work on the cooperative volume was commenced. Sellars' thesis in this study is that of the critical realists generally. The thesis is "that idealism and realism have had essentially the same view of knowledge and that the large measure of sterility which has accompanied philosophical controversy is due to the constant assumption that knowledge always involves the presence of the existent known in the field of consciousness" (p. vii).

V. THE STANDPOINT OF CRITICAL REALISM

LIKE new realism, critical realism is both a doctrine of revolt and a theory of reform. Let us notice these two interests in the conceptions of the critical realist.

Critical Realism as Polemic.—The critical realist objects both to the epistemological notion that mind constitutes matter, and to the idea in certain epistemologies that matter constitutes mind. He is opposed to monistic epistemology, whether it be mentalistic or materialistic. Furthermore, he objects both to the theory that we know only psychical content and to the conception that we are aware only of physical objects.

In the opening article in the joint work Durant Drake, in discussing "the approach to critical realism," attacks subjectivism by emphasizing the pragmatic justification for our belief in the existence of the physical world. Drake also criticizes the naïve realist for treating sense data as aspects of the object. To say that qualities exist in the object is to assert that perception is a selective mechanism; to say that qualities exist in the perceiver and are put by him into the object is to assert that perception is a projective mechanism. But, affirms Drake, perception is neither selective nor projective.

A. O. Lovejoy's discussion in the volume is a critical exam-

ination of the pragmatism of John Dewey. The criticism brings out the point that the pragmatist, in spite of his desire to support a monistic epistemology, is committed to an epistemological principle that is dualistic. This is no demerit, however, in the opinion of the critical realist since critical realism itself is opposed to epistemological monism.

J. B. Pratt's article on "the possibility of knowledge" is directed against the dogmatism of other standpoints. Idealism, pragmatism and new realism have been so confident that mind can get into actual contact with its object that they have been unable to account for the actuality of error. Pratt asserts the objectivity of many minds and of physical entities, but he declares that their objectivity is apprehended by inferential rather than by immediate knowledge. Pratt insists, however, that objects of knowledge are not, therefore, ideal. This view of the transcendence of the object does not imply skepticism on the part of the critical realist. If it means skepticism to infer the independence of entities known then the larger part of geology and astronomy, of chemistry and physics, etc., is only guess work.

A. K. Rogers writes like a critic in his treatment of "the problem of error." He criticizes the accounts of error presented in the various current philosophies. The objective idealist minimizes actual error by making it a case of partial truth. The new realist fails to distinguish between error and truth, because, for him, the erroneous and the true are equally real. To grant objectivity to the false as well as to the true is to preclude any essential distinction between them. The pragmatist is criticized for neglecting the problem of the nature of error, as such, in order to depict the conditions and consequences of error.

Critical realism reacts hostilely towards new realism for the same reason that the latter objects to traditional idealism. To the critical realist, new realism, like idealism, deprives error of the peculiar character which it should possess in contradistinction to truth. In short, both idealism and new realism are guilty of attempting to interpret knowledge in terms of two factors, the psychical and the physical, when there are three constituents

in the situation called knowing. This third element the critical realist entitles *essence*. The constructive part of critical realism comprises the definition and defense of essence.

Critical Realism as Positive.—For the critical realist, in the knowledge situation are always present three factors: the physical object, the mental event, and the datum, or essence. Durant Drake, A. K. Rogers, George Santayana, and C. A. Strong hold the datum to be non-mental and non-physical. The physical and the mental are regarded as existents. Data are considered to be logical entities, which have no locus in the world of existence. That data refer to existents is due to instinctive feelings and practical beliefs. For A. O. Lovejoy, J. B. Pratt and R. W. Sellars the datum is an existent; it is the character of the mental state of the moment. But whether it is regarded as existent or non-existent, for all critical realists, the datum is the middle term in the knowing complex. The self intuits the datum, which in turn represents the object. Knowledge is consequently, as Santayana asserts, transitive and relevant. It is transitive in the sense that the knowing mind, by means of the essence, can pass over from the psychological to the physical world. Knowledge is relevant in the respect that the physical reality may have the qualities assigned to it by the essence. The essence in critical realism has much the same function as pure consciousness in phenomenology. Santayana shows in his paper in the cooperative study that in biology, psychology and logic proofs for the transitive and relevant character of knowledge are to be found.[39] In C. A. Strong's essay is a definite description of essence. His interpretation may be taken as representative of the majority opinion among critical realists. For Strong, data are not the real things themselves; they are not psychological in nature; they are not existences. The critical realist's essence is the *what* in knowledge divorced from the *that*. It may be presented to either sense or thought, and may be indefinitely complex. It is the

[39] In chap. IX of *Scepticism and Animal Faith* George Santayana enumerates some of the values for life and philosophy which the doctrine of essence has contributed.

"given" meaning or intent of the real object which is postulated as existing. When the nature of the existent corresponds to the meaning of the essence, knowledge is true; when there is inadequate correspondence between existent and essence, knowledge is faulty.

Critical Realism and Emergent Evolution.—In the book, *Evolutionary Naturalism*, we have the philosophy of evolution of a critical realist who assumes the rôle of cosmologist. R. W. Sellars is the author, and his theory is quite similar to the cosmological doctrines of the new realists. Sellars is a believer in "the novel, in time, and creative accumulation" (p. 334). For him, evolution is the active rise of new wholes and new properties. These wholes can, of course, be disintegrated—as death only too clearly shows—but the products of the disintegration are not the equivalent effectively and qualitatively of the whole. There may be quantitative equivalence, but quality is not a simple function of quantity. "Evolutionary naturalism does not sink man back into nature," but the evolutionary naturalist "does not assign intrinsic value to the universe as a whole." Sellars argues for the continuity between parts in the evolutionary process which will preclude causal breaks, but he denies that causal continuity implies that the future is like the past and that change can only be repetitious. Continuity and novelty are compatible terms. (See p. 284.) Needless to say, this is a naturalistic cosmology very different from the naturalism of the past.

Concluding our discussion of realistic epistemology brings to an end the considerations of Part II of the present work. The new realist's philosophical disciplines were observed to carry out quite successfully the principles of his pluralistic logic with its theory of external relations. It has been noticed, however, that in new realism the metaphysical features of traditional naturalistic and idealistic theories are not entirely lacking. Substance and cause in their historical sense are declared taboo in the platform of new realism, but, as we have tried to show, these con-

cepts do creep into the doctrines which represent the realistic platform in actual expression.

The following part of the book is a consideration of the religious notions of new realism, which follow from the logical, ontological, cosmological, and epistemological features of realistic doctrine.

PART THREE

NEW REALISM AND RELIGION

CHAPTER VII

DERIVATIVE DEITY

THE THEOLOGY OF THE NEW REALIST

Our discussion of new realism's religious notions frankly manifests the speculative bias. The justification is in the fact that new realism itself supports such a motive. We believe that the new realist's creatively synthetic cosmology gives us reason to judge the given by the absent, the factual by the normative, the present by the future. If the theory of emergence is true, one level cannot be judged by the levels below it. The higher level represents a quality which the lower levels do not contain. No level can estimate the value of its own being, because of the impossibility of an entity being both subject and object at the same time. There would be no judge to consider the estimator. If the character or value of any particular order is to be estimated, some higher order must do the estimating.

It is on the basis of argumentation of this sort that we believe that new realism should be judged by axiological as well as by logical, ontological, cosmological and epistemological criteria. Worth cannot be interpreted fully in terms of logic, mathematics, mechanics, physics, chemistry, biology and psychology. In an emerging reality values must be interpreted in the light of entities that are more than values, or at least that represent values yet unwon. Our position is that of W. R. Sorley who holds that the "moral world is in this respect entirely unlike the physical world. The latter is conceived as always consisting of the same quantity of both matter and energy. The moral world is not thus fixed in the values it contains. The sum of values is not a constant. It may suffer diminution; it is also capable of

indefinite increase. Like M. Bergson's universe, it is in continual process of creation."[1]

Our requirement that new realism must satisfy prospective criteria is none other than the demand that it must meet the emotional claims of sentiment as well as the intellectualistic exactions of science. In short, we would argue that the interests historically associated with religion should be given consideration in testing for truth. For with religion more than with any other discipline has been associated the judgment that consistency with ideals is necessary in a philosophy which is true. What are the ideals which should be regarded as standards in judging the worth of new realism? This is the question we are now to consider.

I. THE CRITERIA OF RELIGIOUS THEORY

In seeking for the chief aspirations which have perennially challenged man two ideals speedily come to mind, namely, the concept of *individuality* and the concept of *progress*. Let us notice the characteristics of these two normative notions.

The Nature of the Concepts of Individuality and Progress.— Individuality is that aspect of being which represents it as possessing features that are its and its alone. To have individuality must be unique and irreplaceable. No other entity can be completely like it. It defies definition. It is in a class by itself. Individuality has been applied chiefly to two kinds of being, universal and simple being. Universal being is indefinable because it is the *summum genus*. There is no class in which it can be placed. Simple being is indefinable because it is the *infima species*, and, therefore, is void of *differentiae*. Universal being is unique because its connotation is so extensive that denotation becomes insignificant. Particular being is unique in that denotation is so intensive that connotation has no import. The idealist of traditional thought has emphasized the notion of individuality as applied to universal being; the realist of recent reflections is more concerned with individuality as the mark of simple

[1] *Moral Values and the Idea of God*, p. 180.

being. Both are agreed, however, that an individual must be a novelty in a class by itself. For the idealist and realist alike, an individual is self-existent, having in itself its own grounds for being. For both, an individual is self-identical, possessing a recognizableness which persists in spite of the vicissitudes of a varied career. In a word, for idealist and realist, individuality is the axiological correlate of the doctrine of substance in cosmology and epistemology. It is the metaphysical concept of substance, expressed in the esthetic language of religion.

The concept of progress refers to the nature of being as a changing entity. The changing character of being, like its permanent individuality, is interpreted differently by the traditional idealists and the new realists. To the idealist, the changing aspect of being is significant of internal growth. Universal being cannot be conceived of developing in any other way. Change for the idealist is motion within a whole which does not move. Progress, therefore, for the idealist is a term which applies significantly only to the part. To the realist, on the other hand, the changing character of being has an external implication. For the realistic thinker, being changes not merely in a passive sense; it changes in an active way. It not only changes, but it changes other things than itself. In other words, it makes an actual difference in the universe. The universe as a whole is modified because the particular individuals of the universe have productive power. For the realist, therefore, progress is a term which does have meaning from the standpoint of the world as a whole. Both idealist and realist agree, however, that whatever it may be that progresses, the universal or the particular, there is in reality some force making for more valuable types of being. In brief, for the idealist and the realist alike, the notion of progress is the correlate in axiology for the concept of causality in cosmological and epistemological theory. The idea of progress is the metaphysical doctrine of causality expressed in the artistic terminology of religion.

As substance and causality may be considered the constituent elements of the doctrine of reality in philosophy, individuality

and progress may be regarded as comprising, in religion, the concept of personality. Being, which is at the same time both individual and progressive, is a self. To the idealist, this means that only the universe, only the absolute, can be a self. To the realist, it means that only in finite reality can selfhood be found. For both, however, there is no doubt that personality is a concept which no doctrine of the world can legitimately neglect.

The concept of personality, like the ideas of individuality and progress which compose it, is an ideal notion more significant of man's sentimentality than of his scientific temper. They are ideals as well as facts. As W. M. Urban asserts: "Whatever may be said as to the ultimate metaphysical reality of the self, it is not, strictly speaking, an object of immediate experience, not an object of perception, nor, on the side of feeling, of simple appreciation, but is rather a construct of a higher order built upon immediate perceptions and appreciations. . . . It is, first of all, a worth construction, and only secondarily an object of knowledge."[2]

Not only does the concept of personality satisfy the requirement that the criteria of religion shall be normative, but it is, we believe, significant and inclusive enough to cover all other ideal standards possible of presentation. J. A. Leighton convincingly expresses this idea as follows: "If we recognize that the willing service of certain values, such as justice, love, truth and beauty, are the conditions through which our spiritual and personal lives are fulfilled, this recognition implies that such values inhere in the constitution of ultimate reality and this implies that reality, at its highest and most permanent level is spiritual and personal."[3] In another work by the same author we have these words: "The self is the product of the universe and the best clue to the nature of the whole."[4] To interpret the world in terms of personality is to follow the procedure of the great philosophers of all time. In the theories of Plato, Aristotle,

[2] *Valuation, Its Nature and Laws*, pp. 262, 263.
[3] *Man and the Cosmos*, p. 408.
[4] *The Field of Philosophy*, definitive edition, p. 443.

Plotinus, Spinoza, Leibnitz, Kant, Hegel, Berkeley, Hobbes, Locke, Hume, Green, James, Bosanquet, Bradley and Royce, that is considered most valuable which contributes most to the advancement and fulfilment of personality, human or divine, or both.

Furthermore, the personality concepts, individuality and progress, have axiological utility because they have a definite humanistic connotation. In spite of super-man implications, they are criteria of value which take full cognizance of the loves and hates of human selves. They do refer to realities over and above the finite self, but their transcendence is one which includes finitude and not the transcendence of logical abstractions and neutral concepts far removed from life. To identify value with the pluralistic realist's eternal reals or with the singularistic idealist's absolute reality is to overlook the fact "that, for human beings, value is an ideal aim only gradually and partially achieved in time, and thus it seems to deprive the human process of striving for and achieving harmonious organization of the whole temporal life of effort and progress towards higher values, of any value."[5] However hypothetical the concepts of individuality and progress may seem, however suggestive of a realm beyond and above the human they may appear, the words of T. H. Green will still be true, that "our ultimate standard of worth is an ideal of *personal* worth. All other values are relative to values for, of, or in a person."[6]

As has been pointed out, the concepts of individuality and progress represent respectively the axiological phases of the problems of substance and cause. The doctrine of divine individuality is the religious corollary of the substance problem in ontology, and the doctrine of human individuality is the religious counterpart of the substance problem in epistemology. The doctrine of infinite progress in religion corresponds to the theory of cause in cosmology, and the doctrine of finite progress represents the implications in religion of the notion of cause as it

[5] J. A. Leighton, *The Field of Philosophy*, definitive edition, p. 480.
[6] *Prolegomena to Ethics*, sec. 184.

appears in psychology. Let us now turn to a discussion of these two concepts which comprise the notion of personality as they appear in realistic theory, keeping in mind the requirement that value theories, if adequate, should satisfy the aspirations and speculative ideals of man.

The present chapter will discuss the problem of individuality in its universal aspects. In short, it will consider the new realist's idea of the individuality of God. The next chapter will examine the realistic concept of progress in its cosmical relationships. As in Part II, the chapter on epistemology brought the universal questions of ontology and cosmology down to human proportions, so in the third chapter of the present part of the book, the psychological discussion will consider the concepts of individuality and progress in their finite applications.

II. THE BEING OF GOD IN NEW REALISM

To the religious consciousness historically God has always had one outstanding significance. He has traditionally been associated with First Cause. He has been viewed as the eternal substance underlying and hinterlying the world of time. The ontological, cosmological and anthropological arguments for God have been strengtheners of this belief. In modern times this desire for a supernatural ground for reality manifests itself in two forms. One is the desire for a personal God, a being with whom man may communicate, from whom man may receive power and whom man may serve. This is the desire which is chiefly manifested in the theologies of religionists. The other desire is for a theory of reality which will justify faith in the conservation of value. It represents a looking to the universe itself, rather than to divine personality for the maintenance and continuance of values. This desire is primarily manifested in the theodicies of philosophers.

Since these two motives, one to believe in the existence of a supernatural being, the other to believe in the eternality of values, have been historically associated with the nature of God, we shall treat them both in our discussion of new realism's

doctrine of divine individuality. The question of God's existence will be considered first.

The Existent, Finite God of New Realism.—With respect to the demand made by the religionists for a God who is an independent entity, it can be said that the new realist believes in such a deity. The God of the new realist is not the nominalistic, humanistic working hypothesis of pragmatism; neither is He the object of faith and postulation, as in phenomenalism; nor, finally, is He the absolute experience of idealism. To use the definition of E. G. Spaulding: "God is the totality of values, both existent and subsistent, and of those agencies and efficiencies with which these values are identical."[7] He is, therefore, immanent and transcendent, because values are immanent and transcendent. He is immanent as love, affection, goodness, respect and reverence prevail as existent values among and in men. He is transcendent as subsistent ideals, which act upon men as the stimulators of moral aspiration. "In brief," according to Spaulding, "God is value, the active, 'living' principle of the conservation of values and of their efficiency."[8]

The Weakness of the Realistic Conception of God's Nature.—The God of new realism is supreme, but He is not infinite. He is the entity which, by creative synthesis, axiological elements of the universe constitute.

The religious consciousness will not be satisfied with such an interpretation of Deity. The religionist desires a God who is the creator and not the creation of values. Furthermore, the new realist's God is not the traditional First Cause of theology in another sense. His influence is not universal. There are features of reality wholly independent of his control. These factors, without necessary relationship to God, are the many "non-value entities" which the world contains. Such entities, according to E. G. Spaulding, are numbers, space, time, electrons, atoms, masses, molecules, and the like; also entities that are false and

[7] *The New Rationalism*, p. 517.
[8] *ibid.*, p. 517.

erroneous, especially evil and ugliness.[9] This theory of a finite God may satisfy the religious souls who want to free God from being the cause of evil. It will hardly bring satisfaction, however, to the spiritually minded who would conceive of God as the conqueror of evil. To use the words of J. A. Leighton respecting the belief in a finite God: "This theory escapes the problem of evil, that is, of squaring the evil in the world with the goodness and power of God, by accepting a limited God. Its moral world is—*God and Company with assets and liabilities limited.* . . . Therefore the aid and comfort which such a finite God would render the soul would probably be slight. . . . What the soul of man seeks, when in distress of weather, is a port that is *absolutely a port, a sure refuge.*"[10] The theology of new realism allows little hope for the ultimate supremacy of goodness when God is simply the collection of values in a world in which disvalues are as real as values. "The realist," as M. R. Cohen asserts, "lives in a world in which there are all sorts of possibilities of which only a small number succeed in becoming actual, and where all our gods or goods may meet with defeat."[11]

The new realist is in a predicament in his views of God. In maintaining that God is transcendent, that is, that He is distinct from the world, realistic theory fails to satisfy the religious consciousness for companionship with the divine; in interpreting God as immanent, that is, that he is the dynamic principle in the world process, new realism virtually acknowledges the legitimacy of the idealist's notion of a teleological intelligence in the cosmos. The new realist's interpretation of the immanence of God as implying agency or efficiency is hardly consistent with the general realistic doctrine that causes and powers are anthropomorphic superstitions.

III. THE PERMANENCE OF VALUES

Let us now examine the theology of new realism to learn how

[9] See *The New Rationalism*, p. 518.
[10] *The Field of Philosophy*, definitive edition, pp. 421, 422.
[11] *Philosophical Review*, Vol. XXV, p. 382.

the doctrine deals with the second religious motive historically associated with the concept of God, namely, the desire to show that values are eternal in the world.

The Realistic Idea of Perpetual Values.—Values are conserved, according to some new realists, not because an omnipotent God sees to it that they are saved, nor because the universe is such that they cannot be lost, but because values are in themselves eternal. They have their dwelling place in the realm of subsistence, where there is no variableness, neither shadow of turning. For G. E. Moore, for instance, goodness is a simple, indefinable quality. To define it by reference to some supersensible reality is to commit the error of metaphysics; to define it by reference to some natural object is to commit the error of naturalism. Good cannot be identified with any of the things said to be good. Good is, like yellow, an ultimate revealed by analysis.[12]

Moore argues for the independence of value on the basis of the intrinsic nature of the thing which possesses it. Value is not dependent for its status upon psychological desire or interest. He defines the impersonal character of value in the two following statements: (1) "It is impossible for what is strictly *one and the same* thing to possess that kind of value at one time, or in one set of circumstances, and not to possess it at another; and equally *impossible* for it to possess it in one degree at one time, or in one set of circumstances, and to possess it in a different degree at another, or in a different set," and (2) "If a given thing possesses any kind of intrinsic value in a certain degree, then not only must that same thing possess it, under all circumstances, in the same degree, but also anything *exactly like* it, must under all circumstances possess it in exactly the same degree."[13] As can be observed from these two conditions there is a universal character to intrinsic value which prevents it from being subjective. For an entity, in Moore's theory, could have intrinsic value even though it existed in a universe without

[12] See *Principia Ethica*, secs. 5-22, and *Ethics*, chap. VII.
[13] *Philosophical Studies*, p. 261.

persons. For a thing to possess intrinsic value means, believes Moore, for it to possess a character which it would have in a world which would even have causal laws different from our own. In his paper on "The Elements of Ethics" in *Philosophical Essays* (pp. 4-15), Bertrand Russell defends the point of view of Moore that values are intrinsic, independent of human relationships, and eternal.

The objectivity of values is also supported by John Laird in *A Study in Realism.* He writes (p. 129): "There is beauty, I take it, in sky and cloud and sea, in lilies and in sunsets, in the glow of bracken in autumn and in the enticing greenness of a leafy spring. Nature, indeed is infinitely beautiful, and she seems to wear her beauty as she wears color or sound. Why then should her beauty belong to us rather than to her?" Similarly does Laird think of the ethical worth of human actions, human character and human dispositions. They are good or bad in a moral sense, and value or its opposite belongs to them in the same sense as redness belongs to a cherry. (See p. 144.)

The doctrine of the independence of values is found also today in the neo-Thomistic philosophy of Catholic thinkers. Outstanding among contemporary exponents of the philosophical theory of Aquinas are Cardinal Mercier, P. Coffey, René Kremer,[14] R. P. Garrigou-Lagrange, and L. Noël. The chief center of learning for the promotion of the standpoint is the Institute of Philosophy at Louvain. The historic position of Catholic philosophy is maintained that truth, goodness and beauty are from a human outlook psychological, whereas from the divine perspective they are ontological. Psychologically they are many, temporal and mutable; ontologically they are one, eternal and changeless. Real truth, real good, real beauty and real being are identical. The neo-Thomist, like the new realist, believes that

[14] René Kremer has written an excellent expository and critical survey of recent realistic philosophy in America, *Le néo-réalisme américain.* The work also contains remarks concerning the author's own Thomistic point of view. For a bibliography of contemporary Catholic realism, see the appendix to the present book.

we apprehend these universal values more by intellectual effort than by mystical intuition. We derive our knowledge of the ideal forms by abstraction, comparison, generalization and reflection on the data of experience. The truth which we psychologically acquire is indicative of ontological truth in the things experienced. Although the neo-Thomist and the new realist both believe that the being of values is independent of man, the former differs from the latter in holding that values are not self-sustaining. The Catholic realistic thinker does not repudiate the conception of substance. God, to the Thomistic philosopher, is not merely the sum-total of all the worth-while values in the world. He is the source, sustainer and systematizer of all values. The present-day exponent of Catholic doctrine is like the modern realist in treating the ontological as more fundamental than the psychological, but he is like the medieval realist when he treats the theological as prior to the ontological. In this, we believe the Thomistic philosopher to be essentially right, for, in the words of one who is neither a medieval nor a modern realist, a "pluralistic universe needs, after all, a *soul*, not a soul as a unitary principle, but a soul as a vitalizing agency. At any rate, some evolutionary urge in the existential world of time and space, some *élan vital*, some creative agency, some cosmic will is necessary, it would seem."[15]

The Deficiency of Impersonal Values.—If the conception of values held by G. E. Moore and Bertrand Russell were true, they would only be useful as objects of esthetic appreciation. But values must be more than entities for man merely to contemplate if they are to give him the richest satisfaction. Although ideal, they must be suggestive of things vibrant with life and meaning. Values are not neutral, simple, qualityless essences. They are the positive, complex, concrete objectives which stimulate men to live and die for a cause. As the critical realist, R. W. Sellars, asserts: "We value things as combining them with ourselves in that feeling and doing which is life itself. In other words, valuing concerns cooperation with objects. Whereas in pure

[15] G. T. W. Patrick, *Introduction to Philosophy*, p. 262.

knowledge we stand off from things and contemplate them, withstrain ourselves, withhold our passions and sentiments, in valuation we link ourselves with our world much as an individual links himself with others in a social group."[16] That values must have an appeal for man need not mean that values are not grounded in the nature of reality; it need not mean that axiology must be agnostic or relativistic; it only means that in axiology human interest and bias must be considered in judging which objects in the world have value. As R. B. Perry, a new realist who holds that value is dependent upon desire, states: "The relativity of value to 'valuing,' or to some desiderative action of mind, no more prejudices its 'objectivity' than does their relativity to parents prejudice the objectivity of offspring."[17]

At all events, that human desire invests objects with value is position which is receiving wide acceptance in these days. To use the words of Perry again: "It is broad and elastic enough to contain views so different as the 'self-realization' view of Green, Bradley, and their followers, Windelband's '*Beurtheilung*,' Rickert's '*unmittelbares Gefühl des Sollens*,' Westermark's 'retributive emotions,' Santayana's 'objectified pleasure,' Stuart's 'valuation process,' Meinong's '*Urtheilsgefühl*,' Royce's 'loyalty,' and countless other conceptions which instruct, edify and divide us."[18]

At first notice it would seem that the standpoint of G. E. Moore and Bertrand Russell is more satisfying to the religious consciousness than the doctrine of Perry. To believe that entities, like truth, goodness and beauty, are eternally established and sure of existence apart from the influence of all-too mundane men does appeal to the soul which wants values everlastingly safe. On investigation, however, this position is seen to be conducive to an attitude of indifference, or even of pessimism, which makes it destructive of the interests which religion has historically sought to cultivate. It is not enough for truth, goodness

[16] *Philosophical Review*, Vol. XXXV, p. 136.
[17] *Present Philosophical Tendencies*, p. 339.
[18] *The Journal of Philosophy*, 11, p. 149.

and beauty to be objectively and universally true. As R. B. Perry insists: "Propositions concerning value may hold *at* all times, and even *for* all time and yet be metaphysically insignificant. . . . It is vain, therefore, to attempt to ground religious faith, as the Ritschlians have attempted to do, on the mere validity of values. For religious faith has to do, not only with the truth that there are values, but *with the hope that they may prevail.*"[19] Intrinsic values like those expounded by G. E. Moore are good for all possible universes but are not good for the only actual world we know.

In Bertrand Russell's "The Free Man's Worship"[20] is to be found an eloquent statement of the religious doctrine of one who contends that man has no constitutive function with respect to the world as a whole. It is the religion of a thinker who holds that philosophy must not hope to answer the practical problems of life, who believes that philosophy involves suppression of hopes and fears, loves and hates, and the whole subjective emotional life, until we become subdued to the material, able to see it frankly, without preconceptions, without bias.[21] According to Russell, ideals as causative forces are meaningless in our alien and inhuman world. Fact and value are in irreconcilable opposition. "To abandon the struggle for private happiness, to expel all eagerness of temporary desire, to burn with passion for eternal things—this is emancipation, and this is the free man's worship."[22] In the consciousness that he has arrived at the stage of disillusionment the free man, thinks Russell, finds his sense of dignity and power.

Russell, however, does have a place for ideals. They are the objects of contemplation, they are the constructs of a compensating imagination. Through the insight of creative idealism "mind asserts its subtle mastery over the thoughtless forces of

[19] *Present Philosophical Tendencies*, p. 340.
[20] See *Mysticism and Logic*, chap. III.
[21] *ibid.*, p. 44.
[22] *ibid.*, p. 55.

nature."[23] In fleeing to the realm of eternal truths, to the subsistential sphere where things are immune from the ravages of Time and Fate and Death, liberty is found. By renouncing the empirical, concrete world for the conceptual, abstract world freedom is attained. It is not a passive renunciation, however. "For not by renunciation alone can we build a temple for the worship of our own ideals. Haunting foreshadowings of the temple appear in the realm of imagination, in music, in architecture, in the untroubled kingdom of reason, and in the golden sunset magic of lyrics, where beauty shines and glows, remote from the touch of sorrow, remote from the fear of change, remote from the failures and disenchantments of the world of fact."[24] George Santayana describes the psychological character of this freeing process as follows: "The rhythms, the sweep, the impetuosity of impassioned contemplation not only contain in themselves a great vitality and potency, but they often succeed in engaging the lower functions in a sympathetic vibration, and we see the whole body and soul rapt, as we say, and borne along by the harmonies of imagination and thought. . . . Such a faculty, when fully developed, is capable of yielding pleasures as intense and voluminous as those proper to rudimentary animal functions, wrongly supposed to be more vital."[25]

R. F. A. Hoernle speaks thus of the antithesis of scientific facts and human values in Russell's philosophy: "It is now a passionate denial that reason can be at home, or help to make men feel at home, in this actual concrete world of ours which, for better or for worse, grips and holds us by all sides of our natures. It declares the true home of reason to be another world, a world of abstract logical entities and relations, with a fascination and beauty of its own, a perfection which the intellect can enjoy, untroubled by passion and desire."[26] Russell's theory

[23] *Mysticism and Logic*, p. 53.
[24] *ibid.*, p. 52
[25] *The Life of Reason*, Vol. I, p. 242.
[26] *Studies in Contemporary Metaphysics*, p. 44. It needs to be pointed out, however, that Russell, when he moves from logical to practical

fails to meet the requirement of religion that man should be concerned to help human beings inferior to himself. The doctrine of Russell promises salvation only to those with a capacity for contemplation, for those with the gift of intuition. The defenders of Russell's position are not selfish. They would that all were such as they are. It is a beautiful and sublime concern which the evangels of the highly desirable kingdom of the contemplators manifest towards mankind. But it will mean nothing if the emancipated do not desert their ivory towers long enough to see to it that the physiological and physical conditions of men are such that opportunities to contemplate are equal for all. But this the dwellers in the ideal world will not do. Such a procedure would signify surrender to the impelling powers of human feeling, forces to which the free man will ever be superior. The Russellite saves himself by losing himself, but his self-sacrifice is not that of the great religious heroes. The spiritual souls of the centuries have found life, not by leaving and scorning the world, but by loving and serving the world.

There is perhaps a reason why in Russell's religion the motive of social salvation is not prominent. The God of Russell is, as George Santayana points out, a Calvinistic God who decrees what is good and what is evil. But Russell's God is a Calvinistic God who has lost not only his creative, but also his punitive powers. If wrong doers are not to be punished in a world to come, the sanction for treating religion as a way of redeeming all loses much of its force. In Russell's religion there may be a hellish existence in the realm of the present, but it does not threaten the reprobate with an eternal hell in the world to come.[27]

considerations, does ascribe to reason an instrumental and consequential function. That he does not believe that reason is ineffective in the fields of economics and politics is brought out clearly in his work on the *Prospects of Industrial Civilization*. In this study Russell definitely assumes that by the use of rational intelligence civilization can be rescued from its present condition of chaos. See *op cit.*, chapter on "The Sources of Power," sec. 4.

[27] See *Winds of Doctrine*, p. 153.

Russell's doctrine of renunciation is valid only if the universe is truly, as he believes it to be, omnipotent matter, an empire of chance, blind to good and evil, ruthlessly reckless of destruction, a universe of ruins.[28] Russell here, however, is guilty of the error of exclusive particularity. He interprets the universe wholly in terms of the narrow and abstract predictions of astronomy, and thus, according to R. B. Perry, betrays a bias of mind that is little less provincial and unimaginative than the most naïve anthropomorphism. "What that residual cosmos which looms beyond the border of knowledge shall in time bring forth, no man that has yet been born can say," objects Perry to Russell's wholesale pessimism.[29] E. G. Spaulding is also opposed to Russell's conclusions. Spaulding contends, as against a possible despair regarding the destiny of the universe, that manifestations of a creative, progressive synthesis are more apparent in the world than are evidences that there is a general running down.[30]

The Positive Worth of the Notion of Intrinsic Values.—Before concluding the discussion of divine individuality a word should be said regarding an important beneficial significance which an axiology represented by the value theories of Moore and Russell may have. The stern and rigorous attitude of the new realists should do much to discredit the all-too complacent optimism which characterizes the pragmatic and melioristic temper of the American mind. America at the present time is decidedly an industrial and commercial nation. The values of the theoretical or contemplative life are made alarmingly subservient to the goods which satisfy man's economic and social needs. The Americans of today are a practical people: we hear a great deal more about the common weal than we do about individual culture; the good of society, rather than personal refinement, is increasingly becoming the end of education. There is undoubtedly

[28] See *Mysticism and Logic*, pp. 56, 57; and *Philosophical Essays*, pp. 60, 61.
[29] *Present Philosophical Tendencies*, p. 347.
[30] See *The New Rationalism*, p. 512.

prevalent among our people the opinion that it is foolish to think of certain things as being worth while in themselves. The demand of the American public is that a thing must be more than good—it must be good for something. The realistic doctrine which finds the status of values in a remote subsistential realm may lack an adequate practical, utilitarian and humanitarian significance, but it certainly represents a significant notice of danger to a nation engrossed in Mammon. The call to contemplation is the ancient cry of warning that where there is no vision the people perish. Indeed, the new realist's conception of values as independent of man is necessary even if man would be an efficient doer. Faith in the objectivity and independence of normative ideals is a condition for all sorts of reconstructive behavior. This import of the realistic notion of values is discussed by W. P. Montague and H. H. Parkhurst as follows: "From the individual standpoint, belief in the value of a thing is exactly like belief in its truth. In either case the belief may be mistaken, but the assumption of its independent validity is a prerequisite of all action. The sculptor, the architect, the painter, the musician, when they seek to embody in material form the as yet non-existent objects of their imagination, are inspired to their efforts by their belief in the more than imaginary beauty of those objects. If they supposed for a moment that the worth of what they were to create were merely subjective, and dependent upon or derived from their own attitudes of approval, their motive for creation would cease to be esthetic and become merely hedonic and selfish. In short, even from the hedonistic standpoint, beauty and goodness are the permanent possibilities of enjoyment as truth is the permanent possibility of apprehension."[31]

We are now ready to examine the other important feature of God's personality, namely, His purposiveness. This aspect of divine selfhood is manifest in the teleological character of crea-

[31] *Mind, N.S.*, Vol. XXX, 1921, p. 176.

tion. It means, in short, that there is progress in the world as a whole. In new realism, as we shall observe, the notion of a progressive universe is the religious corollary of the cosmological notion of creative synthesis.

CHAPTER VIII

PERPETUAL PROGRESS

THE AXIOLOGY OF THE NEW REALIST

To the new realist, evolution is a process which increasingly and persistently makes for the attainment of values throughout reality. What the nature of such evolution is, is the question now before us for consideration. We shall use the evolutionary theories of S. Alexander and E. G. Spaulding as representative of the realistic doctrine of a progressive world.

I. THE ADVANCING UNIVERSE

In every way and on every day the world of the new realist, like the patient of Coué, grows better. The cosmos is a development towards perfection, and perfection is an infinite limit always ahead of the nisus. The world itself achieves what R. B. Perry calls "not a gain here or a gain there, but a *gain on the whole*."[1] How is this optimistic interpretation of the universe presented in the philosophy of S. Alexander?

The Making of Deity.—S. Alexander finds the grounds for the belief in infinite progress in his conception of deity.[2] In his notion of God as an existent always becoming but never attaining deity the idea of a perfectible world appears. As has already been pointed out in the chapter on realistic cosmology, deity, in Alexander's theory, is the next higher empirical quality to the highest we know, namely, mind or consciousness. In fact, deity, for any level of existence, is the next higher empirical quality. It is a variable quality, and as the world develops deity grows

[1] *The Moral Economy*, p. 126.
[2] See *Space, Time and Deity*, Vol. II, Book IV.

with it. On each level of finite creatures deity is for them some unknown, though not unexperienced quality in front, the real nature of which the creatures of the next level enjoy. The world is an infinite straining after deity. Man is finitely infinite. From the standpoint of mind he is a spatio-temporal substance reflecting as an infinite the whole universe, but he is finite in the sense that the mind is dependent for its content upon external objects. God, however, is infinitely infinite. He is infinite internally and externally. He includes both the mind content and the physical nature productive of mind. Space-Time gives God an infinite body, and the all pervasive character of deity provides for Him an infinite mind. Our mind is limited by Space and Time; God, being Space and Time, has not these limitations of human nature. God is not the only infinitely infinite being. Some categorical entities have this property, but God is the only qualitied infinitely infinite reality.

The Teleological World.—S. Alexander wants a growing world, but he does not deny it mechanical character. He interprets the world as advancing, but he also believes that deity, the most normative aspect of the Space-Time system, is subject to the same laws as other empirical qualities. E. G. Spaulding, however, holds that there is a teleological feature to progressive reality. We have already indicated in our discussion of divine individuality that God, for Spaulding, is the totality of immanent and transcendent values, an interpretation which, in its very statement, represents the purposive character of theological being. The interest which Spaulding believes reality to take in continuous betterment may be illustrated by this author's conception of evil.[3] Spaulding objects to evil as a partial appearance of absolute good. Both of these conceptions of evil minimize its actuality, and thereby disparage melioristic activities. Spaulding holds that we fight evil not for the sake of fighting but because evil is evil, something to eliminate and replace with good. Spaulding's theory of a progressive world is not, there-

[3] See *The New Rationalism*, pp. 517 *ff.*

fore, a rash optimism. He holds distinctly, in conformity with this pluralistic principle of external relations, that good and evil are mutually exclusive and not interdependent. How will the good conquer? By respect and reverence and love for the good, and hatred and detestation for all that is evil. The victory of values in other words demands the active, militant attitude of hatred and combativeness. In other words, Spaulding, like Kant, finds the secret of a better world in moral motive, and, interesting to say, like Kant, he finds sanction for motive in the ideas of God and freedom. "For there is a Power for good that works not only side by side with man, but also *in him and through him, flowering in that freedom which is given to his reason to get at truth, to his emotions* to love the beautiful, the good, and the true, and detest the ugly, the evil and the false, and *to his will and manhood to engage in the struggle.*"[4]

Let us pass now to an estimate of the theory that the world is becoming increasingly perfect. Does the general standpoint as expressed in the doctrines of S. Alexander and E. G. Spaulding meet the religious test that philosophy should play fair with human ideals?

II. THE LEGITIMACY OF THE CONCEPT OF PERSISTENT PROGRESS

THE following criticisms are possible against the notion that the universe is a perpetual process towards higher levels.

The Nisus towards Deity as Merely Apparent.—An objection may be made to S. Alexander's theory on the ground that the growth which the world according to him manifests is not an actuality but just an appearance. In other words, Alexander's theory of evolution is guilty of the traditional defect of idealism, namely, that of declaring progress important, and, at the same time, defining the world as a universe in which progress is impossible. In the cosmos of Alexander, as in the absolute of the idealist, everything is given.

When Space-Time, the substratum of all emergent qualities is the same, yesterday and forever, however unique the newly

[4] *op. cit.*, p. 521.

appearing aspects of reality may be, the world is not a truly creative cosmos. Alexander's universe is too much of a "totum simul." As Bergson insists, a reality which is really creative is "productive of effects in which it transcends and expands its own being."[5] E. G. Spaulding's theory of creative synthesis is more satisfactory on this point. His conception does not permit any possible reading back into some ultimate, all-pervasive substance the origins of qualities late in emerging.[6]

The Impossibility of Universal Progress.—A second criticism of S. Alexander's theory, and one that applies to Spaulding's doctrine, is the point that it is doubtful whether the concept of progress is applicable to the world as a whole. Bernard Bosanquet, for instance, believes that universal progress "might be disputed from the modern standpoint on the sole and unique ground that there can be no system of reference from which it can be judged, no intellectual as no physical$\pi o\tilde{v}$ $\sigma\tau\tilde{\omega}$."[7] A. Seth Pringle-Pattison also maintains "that progress is predicable only of the part which can interact with other parts, and, in such interaction, has the nature of the whole to draw upon. It is unintelligible as applied to the whole, and the temporal view of things cannot therefore be ultimate."[8]

The Futility of God in an Advancing World.—Another weakness of Alexander's theory is that the idea of the universe as eternally straining after deity fails to fulfil the desires of the religious consciousness. We have already criticized the realist's God on the ground that He is finite. Our complaint against Alexander's God is that the quality of deity so necessary to the personality of God is never actually present, but always ahead. To use the sportive words of May Sinclair, it is "an unrealized ideal which is jam tomorrow, and better jam the day after tomor-

[5] *Creative Evolution*, pp. 49, 50.
[6] See *The New Rationalism*, pp. 512, 513.
[7] *The Meeting of Extremes in Contemporary Philosophy*, p. 194.
[8] *The Idea of God in the Light of Recent Philosophy*, p. 383. See also F. H. Bradley, *Appearance and Reality*, pp. 499, 500.

row, but never jam today."[9] Alexander sacrifices the existence of deity to save His perfection. This procedure, as May Sinclair points out, does solve the problem of evil. "If deity has not happened yet, it is clearly not responsible for anything that has happened up till now."[10] It gets rid of the problem of evil, but evil itself remains.

Deity is released from the responsibility of evil, however, only to become involved in greater difficulties. How can a God whose deity is ever in the future be thought to have the wisdom, the power, and the goodness which the worshipping soul always requires the Supreme Being to possess? Alexander is in a dilemma in his theological theory. Either his God must be considered as equivalent to Space-Time up to and including the human level, or his God must be thought to embrace a quality which represents a quality yet to be. In either case Alexander's God will not be of much help to finite beings. If the first alternative is taken the service of God for man is limited because he is not more than human; if the second alternative is taken God's service for man is limited because he is of a level altogether beyond the human. It is not enough for a God, which would meet the demands of an axiologically sound theism, to be merely transcendent and immanent. The aspect of transcendence must be coextensive in time with the feature of immanence.

The body of Alexander's God contains evil. His deity alone represents perfection. Since deity is always becoming and never present, the only conclusion possible regarding God as here and now is that He is having as hard a time of it in attaining progress as is man. To call religion faith in a quality like deity, as Alexander does, is to deprive faith of the elements of confidence and assurance, and to identify it with desperate hope. It is a hope, moreover, which does not permit belief in the immortality of the self. The continuation of the human person, like the ongoing of Space-Time itself, is valuable, not in the persistence of an entity valuable in itself, but through the conservation of

[9] *The New Idealism*, p. 214.
[10] *ibid.*, p. 211.

an ideal. Alexander's idea of the world as a scene of constant sacrifice is a lofty conception, but it is highly irrational. It means sacrifice not for the realization, but to the annihilation of finite personality. This is not religion, for religion is with us for the salvation of man, as well as for the glorification of God.

It must be said to the credit of Alexander's theory, that, however pragmatically he may interpret values, he does not reduce religion to a phase of biological adjustment. Values may represent successful adaptations, but deity is not a value, and "the sense of religion is distinguishable from the enthusiasm and passion with which we may regard nature, or beauty, or morality, or truth. These passions may be happiness enough in the lives of some and serve them in place of religion, but they are not the religious passion and only simulate it."[11] In Alexander's theory of a biological, pragmatic significance to values and of a religious, contemplative import to deity we recognize an attempt to synthesize the English and American realistic standpoints.

The Submerging of the Finite in the Infinite.—In concluding our treatment of Alexander's conception of infinite progress it will be instructive to note the criticisms which C. D. Broad makes of the notion of deity. Broad believes Alexander unjustifiably optimistic. "It is baseless to hope that Space-Time will always go on producing higher and higher complexes," and "that we ought to regard these new qualities with something of love and reverence." For, says Broad, "what we know of nature, apart from alleged divine revelations, rather tends to suggest that the higher complexes, such as those that carry life and mind, are unstable," and "what we know of the relations between beings who have only life and those which have both life and mind does not justify a very comforting view of the probable relations between ourselves and gods. Animals have life and mind; plants, I suppose, only life. The main relation of the worshipper to the God in this case is that the latter eats the former when it can. Whilst this presents an interesting variation

[11] *Space, Time and Deity*, Vol. II, p. 407.

of the religious conception of the Sacramental Meal, it may cause the timid worshipper to view the coming of the Kingdom with a certain degree of apprehension."[12]

The optimism which Alexander's theory permits is, in short, an optimism which God only could enjoy. It does not meet the requirement of religion that particular individuals shall have significance. E. G. Spaulding is more humanistic than Alexander and allows the human factor a large place, even a necessary place, in the continuation and direction of progress. The motive of Alexander's philosophy is like that of Holt's. An idealistic and monistic propensity is clearly revealed in their conceptions. The interest of Spaulding, however, is similar to that of Perry, who is tremendously concerned to safeguard the uniqueness of human individuality and to show that "through enlightened action, things shall in time come to what they should be." In brief, Spaulding's theory of progress is pronouncedly pragmatic, while the doctrine of Alexander is largely speculative.

Before ending the present discussion of the new realist's conception of advancing reality, let us notice how the doctrine applies to the problem of social organization.

III. THE SOCIOLOGICAL IMPORT OF REALISTIC AXIOLOGY

REALISTIC theory provides a way of arriving at a conception of the nature of social institutions. Before the state, school or church can be a true interpreter of social phenomena, it must itself be interpreted truly. As Socrates insisted centuries ago, there will never be truth as long as teachers know not themselves. Social organizations must recognize that the famous dictum, "Know thyself," is as applicable to societies as to persons.

The Problem of Sociological Definition.—Current sociological theory is significant of a warfare between two points of view. On the one hand are sociologists who consider institutions as changing orders; on the other hand are sociologists who regard

[12] *Mind, N.S.*, Vol. XXX, pp. 148, 149.

them as of immutable nature. The former interpretation is after the way of inductive science; the latter is according to the method of intuitive culture. The reason for both descriptive and appreciative interpretations in sociology suggests the fact that institutions from their beginning have been considered as endowed with philosophical character. They have been regarded as significant of cosmical reality. The metaphysical implications of personality were early transferred to institutions, so that they have enjoyed the reputation of possessing both earthly and ethereal aspects. This disposition to treat the state, school and church as indicative of the universe made inevitable a linking of sociology and cosmology together. It brought into sociological theory the two methods of interpretation, the scientific and the axiological, which the cosmologist has tried to reconcile since the commencement of metaphysical reflection.

What is true of questions regarding the cosmos is also true regarding questions pertaining to institutions. Many a sociological conflict may perhaps be revealed as groundless when interpreters of state, school and church, following recent realistic cosmologists, seriously criticize the logic of their arguments. The ambiguity in the conception of the state, school or church is, in the last analysis, not a sociological, but a logical matter. In logic the sociological difficulty can be accounted for, and the way to terminate the conflict suggested. To indicate how realistic logic can benefit sociology in these two respects is the purpose of the present section. The way in which logic explains the disagreement between sociological theories will be considered first.

Aristotelian Logic as the Basis of Sociological Controversy.— The traditional sociologies have failed because they have sought to dissolve the discrepancy between the fact and value aspects of the state, school or church by trying either to materialize the mystical or to spiritualize the secular. One solution, conforming to the tradition of naturalism in cosmology, slights the subsistential character of institutions. The other solution, expressive of the idealistic motive in cosmology, scorns the existential aspect. Each standpoint persists in its one-sided position

because, as the exponent of logic in its most recent developments will argue, it has followed too closely the logical doctrine of Aristotle.

Recent logic replies to the traditional contention that values must be facts, or facts must be values by asserting, as we have repeatedly stated, that there are both facts and values. In the fundamental level of reality, namely, the level of logic, facts and values are on an even footing. Both are, in their basic nature, simply quantitative elements externally related to each other. This point of view, using the exactness and exactingness of mathematics, calls attention to the fact, overlooked by both parties in the sociological dispute, that in the realm of fundamental reality, where existents and subsistents are independent reals, there are valid grounds for both materialistic and mystical conceptions of state, school and church. It will not destroy the duality in sociological interpretation, but it will sweep away the logical grounds for dogmatism and intolerance. Let us now notice how the logic of new realism will support a doctrine of institutions which will satisfy both those who regard institutions as supernatural orders and those who interpret institutions as natural phenomena.

Sociological Being on the Foundation of Realistic Logic.—The champion of recent logic, like all logicians, recognizes that the value of logic is revealed, not in the conceptual realm of mathematics, but in the realm of man's actual interests. This means that the new logic must support a theory of institutions which will satisfy man's ideal needs. It means, in brief, that the new logic must justify the notion that institutions, in their nature, are greater than any human personality. No institution can adequately challenge the loyalty of man unless it have capacities more powerful than those of man. There are benefits which levels below man can render to humanity, but they are seldom provocative of glorious aspirations. Lifelong devotion is usually directed towards beings regarded as more significant than those in the human realm. If the state, school or church is to inspire

man to noble service, there must be grounds for believing it to be, in some sense at least, a transcendent reality.

The merit of realistic logic is that it does allow a sociology which regards institutions as superior to man. Unlike traditional logic, it permits such a conception of institutions without destroying the individuality of the human constituency of social organizations. The sociology, which the new logic supports, is suggested by the cosmology which has developed out of recent logical theory. The cosmological doctrine, so helpful to sociological definition, is that of creative synthesis. As has been pointed out previously, according to the doctrine of creative synthesis, every level of reality, whether physical, biological, psychological, or sociological, has both factual and axiological character. The fact aspect represents all the lower levels which constitute any particular stage in the emergent process. The value aspect represents the novel feature which any particular level possesses in addition to its factual constituents.

This cosmological theory may be applied advantageously in sociology. On the one hand, the notion of creative synthesis satisfies the sociologist who is primarily interested in existence. It permits a notion of institutions to which the physicist, chemist, biologist and psychologist may subscribe. Allowing a place for existence, it admits mechanical categories into sociological theory. On the other hand, the doctrine of creative synthesis is acceptable to those who would interpret institutions from the standpoint of art or religion. Acknowledging the legitimacy of ideal features in evolution, it gives welcome to teleological categories. In its scientific nature the realm of institutions is the legitimate field for materialistic control; in its ideal character it is the legitimate field for mystical contemplation.

In defining institutions according to the doctrine of creative synthesis it is to be noted that the relationship between the factual and axiological aspects is not one of necessity. Neither the institution as fact nor the institution as value loses its independence when the two features cooperate together. As in the sphere of abstract logic, so in the world of concrete life, facts

and values are externally related reals. The joining together of the material and mystical aspects of social institutions is a moral challenge, not a metaphysical certainty. A sociology based upon the concepts of mathematical logic and creative synthesis will not serve as a final interpretation of state, school or church. A thinker with speculative proclivities will not accept a doctrine which professedly separates fact and value. But, if such a sociology does lack desirable philosophical unity, it does not lack the qualities of a good working hypothesis. It does represent a theory which will stimulate both naturalistic and idealistic social interpreters. The acceptance of such a sociological standpoint will mean, on the one hand, an increased concern in sociology for the deliverances of the natural sciences; on the other hand, it will mean an added emphasis upon the presentations of intuitive inspiration. There would be no longer a state, school or church for the practical and another for the poetic. Sociological being would be regarded as having a nature in which both materialists and mystics would find much to favor.

We have discussed the realistic concepts of individuality and progress in their cosmical implications. Let us now notice how these concepts fare when they are treated by the new realist in connection with finite human nature. What place have they in the psychological theory of new realism?

CHAPTER IX

MECHANICAL MAN

THE PSYCHOLOGY OF THE NEW REALIST

As has already been stated, the philosopher must be interested in normative as well as descriptive interpretations. Admitting that such an approach cannot be that of simon-pure science, the exponent of philosophy believes that he is, nevertheless, a staunch defender of scientific theory. For to the philosopher no acquisition of scientific knowledge in any field is worth while or can be considered lasting which does not permanently satisfy the interests of every aspect of man's nature. Of course, philosophers have been guilty of exaggerating special interests. The intellectualists, all-too fond of thought, have posited rationality as the essential nature of the world; the mystics have been just as one-sided in interpreting the world on the basis of their too exclusively enjoyed esthetic experiences; and the voluntarists have been as biased in their exclusive explanations of reality in terms of will. The demand, therefore, which impartial philosophy makes upon science, and which we would make upon new realism, is that a complete theory of experience must be consistent with the aspirations of the entire man. Philosophy claims that satisfaction of the intellectual interest is no more imperative than satisfaction of the other motives of human life. The philosopher makes no apology for creatively and poetically explaining the universe's nature. Such explanations, when they are not inconsistent with the principles of logic and science, function instrumentally in enhancing man's intellectual, esthetic, religious and moral interests.

The Importance of Human Selfhood.—In the normative in-

terpretation of the world the philosopher needs to remember one thing. He must remember that his ideals, his tenets of faith, his postulates of practical reason, all the hopes of his heart which color reality with goodness, are justified only to the extent that his notion of finite personality is justified. If a doctrine's theory of human experience is not axiologically satisfying, the doctrine can hardly have acceptable notions of personality in the universe at large. If rationality, freedom and permanence are not real in the realm of human selfhood, there can be neither reason nor pleasure in seeking unity, spirituality and perpetuality in the world as a whole. If a man is not an individual and if man does not progress, belief in cosmical personality would be most extravagant romanticism. Whether, according to new realism, the concepts of individuality and progress are pertinent to man or not, is the question for our present consideration.

I. THE INDIVIDUALITY OF MAN

THE new realists, as we have already learned, are more or less behavioristic in their conceptions of finite selfhood. Their pronounced desire to disparage the subjective aspect in interpretations of the knowledge situation is the motive of behaviorism. Furthermore, the new realist's zeal to explain human activity in terms of impersonalistic science is patently the dominating purpose of the behaviorist. What sort of a doctrine of human individuality does new realism, as behavioristic, espouse? These are questions to which we must now attend.

The Uniqueness of Man as a Biological Fact.—If to be an individual means to be different from everything else, to have a nature that is peculiarly private, then the human self is an individual in realistic theory. The new realist, as behaviorist, believes that the self, notwithstanding its determined place in the cosmical mechanism, is still a center of unique experiences that are its and its alone. The behavioristic new realist, in reducing ultimately all reality to logical subsistents, is after identity, to be sure, but no more than the great idealists does he want identity without difference.

The behaviorist A. P. Weiss emphasizes the compatibility between individuality and objectivity in experiences as follows: Even if the neurologist *saw* all my kinesthetic processes, and saw the contractions of all the muscle fibers, the totality of the biological processes in my own body during the period of observation is different from the totality of the biophysical processes in the neurologist."[1] The behaviorist and the new realist are vigorously insistent that, for them, an activity of organosis possesses all the rich, personal meanings which have traditionally attached to the philosophical psychologist's content of psychosis. As K. S. Lashley, another behaviorist, points out: "When the behaviorist denies that consciousness exists, he denies not the existence of the phenomenon upon which the conception is based, but only the inference that these data constitute a unique mode of existence or that they are not amenable to analysis and description of the same sort as are 'physical data'."[2]

Again, the difference in the fundamental interests of men, due to the different nervous systems inherited, permit the behavioristic new realist to maintain that his doctrine allows uniqueness to personality. As R. B. Perry says of interests, "They are the defining forms of my life. . . . They mark me among my fellows, and give me my place, humble or obscure, in the open field of history."[3] E. B. Holt, in *The Freudian Wish*, distinguishes between activity in living organisms and non-living organisms. Also he distinguishes between organic reaction in general and those which are organized responses. In other words, for Holt, the behaviorists are finding novelty in the reactions of the human organism. According to Holt: "Behavior is any process of release which is a function of factors external to the mechanism released" (p. 167). This "objective reference" to the environment is not found in organisms without an integrated reflex response. On the basis of this objective reference, Holt argues that a correct teleology is to be expressed (pp. 202, 203).

[1] *Psychological Review*, Vol. XXIX, p. 341.
[2] *ibid.*, Vol. XXX, p. 245.
[3] *Present Philosophical Tendencies*, pp. 300, 301.

Holt believes that the central nervous system will serve admirably as the subject of knowledge. It is the individual knower. It is "the center of perception and apperception and guarantor of the 'unity' of consciousness" (pp. 174, 175). For Holt, there is a human soul, but it is the body with its attitudes, conduct and purposes. When, in individuals, the daily behavior of the body is successfully integrated, the "soul" is a unit and a moral unit. (See pp. 200-201.)

The doctrine of consciousness, hylopsychism, presented by W. P. Montague, is still another realistic theory which permits uniqueness in man.[4] To Montague, consciousness is a form of energy instinct in all matter. It is different from mechanical and vital forms of energy, however. In mechanical processes, the dominant characteristic is spatio-temporal change. In vital processes, the chief feature is the change of organic and chemical pattern rather than a mere change of place. Conscious processes are self-transcending. They represent the potentiality of the protoplasm of the brain "to receive and retain in something of their separate specificities the energies that have come from distant objects," and to "make possible an intelligent and purposive adjustment to an environment extending in time and space immeasurably beyond the field of mere chemical and mechanical contacts." The explanation of these properties of consciousness is to be found in the fact that consciousness is a form of potential energy. Potential energy, for Montague, is not externally perceptible, but it is perceivable internally by means of "muscular sense." Furthermore, it can be mathematically symbolized in terms of mass, acceleration and space. For Montague, stress or potential energy, or as he would call it, intensive energy, is as real as kinetic energy. It has striking resemblances in the physical world to that which, in introspection, is defined as psychical. In the first place, each has a private character and essential invisibility. Secondly, both pervade the space of the

[4] See *Essays Philosophical and Psychological in Honor of William James*, pp. 105 *ff*. Also W. P. Montague's paper in *The New Realism*, pp. 289.

things they influence. Neither can be divided in pieces nor conceived as composed of parts. Thirdly, the primacy of unity in each over divisibility makes possible in both fields a behavior that can be called teleological. Fourthly, the conditions under which a stimulus is followed by a sensation happen also to be conditions under which energy passes from a kinetic into an intensive phase. For Montague, tertiary contents of consciousness, as love, envy, fear, hate, etc., are higher orders or derivations into which kinetic energy may pass and from which it may come. For W. B. Pitkin also consciousness enables the knower to be self-transcending. As he puts it: "Consciousness makes possible my regulating my behavior, here and now, to physical objects which have ceased to exist, to others which have not yet come into existence, and to existent objects which are not affecting me in space at the present instant."[5]

The Difficulties of Biological Individuality.—The new realist, in establishing uniqueness upon biological considerations, becomes involved in the phenomenalism of a theory like Pearson's. The nervous system of individuals are all, in the main, similar; therefore there is an order and law to perceptive sequences, or the nervous systems are different and, consequently, the perceptions of men must vary. The first alternative seems substantistic and absolutistic. It surrenders, to an extent at least, the notion of uniqueness. The second alternative can have but two outcomes, skepticism and agnosticism. In the final analysis, moreover, the attempt to save uniqueness by reverting to the biological differences between organisms is to argue for a secondary type of uniqueness. The uniqueness the ideal-loving axiologist wants is that which defines the self as in itself a creating, novelty making entity. New realism, with its conception of the subject as nonexistent or existent merely as spectator has little place for this kind of uniqueness in its conceptions.

E. G. Spaulding in the theory that creative synthesis produces an entity which is a novelty distinct from its component parts, reveals a desire to save the uniqueness of finite selfhood. But

[5] *The New Realism*, p. 457.

this uniqueness also is ultimately dependent upon conditioning factors and is not significant of the self as a novel and active being. That Spaulding acknowledges the weakness of new realism to give a complete account of the self is disclosed in an article of his in *Scribner's Magazine* (January, 1922). Here Spaulding virtually asserts that it is too great an imposition to ask either science or philosophy to explain selfhood. Science and philosophy, he believes, must take coordinate places with religion, art and literature in the interpretation of personality.

In the conceptions of Moore and Alexander, with their respective doctrines of awareness and enjoyment are evidences of a desire to save the uniqueness of personality. Selfhood, in English realistic psychology, is very thin and diaphanous, however, and hardly satisfies the demand of normative axiology that true individuality means content and concreteness to personality.

There is another respect in which new realism proves axiologically insufficient in its conception of human individuality, and that is with regard to the doctrine of immortality. The sciences are indifferent to the problem of immortality, their insistence upon law in their special fields neither negating nor affirming the existence of personal selves after death. Realism, as behavioristic, cannot represent this attitude of agnosticism and neutrality. For behaviorism, in its contempt for parallelism and interactionism and its declaration that the self is a living organism, implicitly affirms the mortality of the self. Needless to say, such a conception of selfhood can never find favor with the religionist who believes the hopes of man have the right to a hearing.[6]

There is one respect in which new realism presents a very satisfying idea of selfhood. The pluralism of realistic theory, with its insistence on the externality of relations, does justify belief in the independence of human selves. Like pragmatism, realism is anti-absolutistic—the champion of meliorism, protestantism and secular progress. "Realism is individualistic, demo-

[6] For a criticism of epistemological neutral monism as destructive of belief in immortality, see J. A. Leighton, *Man and the Cosmos*, p. 458.

cratic and humanitarian in its ethics. It is theistic and melioristic in its religion. Realism is essentially a philosophy which refuses to deceive or console itself by comfortable illusions. It prefers to keep its eyes open."[7] G. Santayana finds in realism's conception of human selfhood a philosophical statement of the American people's love for democracy, modernism, mechanism and outer things.[8] To H. M. Kallen,[9] new realism's "social inspiration is to be sought in financial industrialism, with the regimentation, precision, inevitability of the automatic machine in shop and factory, and in the similar qualities more refined in the mathematics of accounting in bank and office."

New realism, however, is less mundane than pragmatism. Unlike the pragmatist, the realist is interested in entities of eternity as well as in the affairs of time. The exponent of new realism will refuse to agree with the pragmatist that all hypotheses are answerable to experience. Question arises consequently as to whether or not new realism removes immutable truths so far from experience that their worth is negligible for man. The pluralism of realistic doctrine does regard the individual as free from a cosmic tyrant, but it is problematic whether it considers him as endowed with capacities for enjoying his freedom. An anarchy of the many is hardly more desirable than an autocracy of the one. Let us pass on, therefore, to an inspection of realistic psychology with the purpose of learning whether or not the new realist believes in personality as proficient. Does new realism meet the religionist's requirement that man be depicted as a progressive being?

II. THE PROGRESSIVE CHARACTER OF HUMAN NATURE

As in epistemology we found the ontological problem of substance related to the human sphere, so in psychology the cosmological problem of cause may be considered with respect to its significance for the realm of man. As in their epistemological

[7] *The Present Conflict of Ideals*, p. 379.
[8] See *The Journal of Philosophy*, Vol. XI, p. 462.
[9] *ibid.*, Vol. XVIII, p. 574.

notions the realists are less formalistic than in their ontology, so too in their psychology the mechanistic tone of their cosmology gives way to an attitude more "tender-minded." In the realistic ontology and cosmology facts are emphasized to the exclusion of values, except as values themselves are treated as facts. In the realistic epistemology and psychology values as unique and intrinsically different from facts are given appreciable recognition.

From the standpoint of religion, the requirement that the self shall manifest progress is also the demand that the self be considered a value attaining being. According to the normative point of view, human progress, which is entirely mechanistically determined, is not worthy of the name of progress. The axiologist, taking consideration of the aspirations of man, requires that consciousness be interpreted as a function "for" as well as an evolution "from," a creator as well as a creation, a producer as well as a product. In short, the religious ideal demands that man be free.

The question of freedom is the problem of the status of the tertiary qualities. Are ideals and values created, or are they simply contemplated by man? The considerations immediately following indicate the outstanding solutions of the problem as they appear in the theories of selfhood defended by some of the leading realists.

Freedom as Enjoyed Determination.—For S. Alexander values are the compounds of selves and objects. Goodness, truth and beauty require human appreciation. Appreciation in one individual arises through intercourse with other individuals, it is the result of a community of minds. "In judging our objects as true or false, right or wrong, beautiful or ugly, we attend to ourselves as like or different from other selves."[10] Because values are social does not mean, however, that they are constituted by man. For Alexander values are not the creation of selves, but are rather "incidents in the empirical growth of things within what is really the primary reality of Space-

[10] *Space, Time and Deity*, Vol. II, p. 240.

Time."[11] The values, truth, goodness and beauty, do not differ intrinsically from the values which appear in the sub-human stages. Reality, for Alexander, experiments at all of its stages, and values are the adaptations taking place throughout the process of experimentation. Values, instead of being the constructions of human persons, are "the highest instances we know of a feature of things which extends over a much wider range, and is founded in the nature of Space-Time itself; and may even be empirically universal."[12]

Alexander, however, does have a theory of freedom which views the self as being in a unique sense independent of physical and physiological conditions. This view is presented in his doctrine of freedom as enjoyed determination. For Alexander, "freedom does not mean ignorance of the real causes of action. On the contrary it means awareness of them. . . . Freedom of the will always involves purpose, but purpose, though essential to willing, is not essential to its freedom, that is, it does not define its freedom. . . . Willing is eminently free because throughout its stages we have the awareness of enjoyment determined by enjoyment. . . . Let us extend the usage of enjoyment and contemplation, and we shall then see that each contemplated thing enjoys its own peculiar level of existence while it contemplates the levels below it. . . . Thus freedom in general is the experience which each thing has of its own nature; and a distinction parallel to ours of freedom and unfreedom exists for the plant and for the stone or atom."[13] For Alexander freedom, as enjoyed determination, is not a prerogative of human beings, but is found throughout the world.

There is permitted a freedom for the self in this panpsychistic theory of enjoyment. But it allows an apparent freedom only, the freedom of a spectator, not the freedom of a fighter in the fray. It will hardly satisfy the axiologist who wants the self to be a dynamic agency with influence over the beings above and

[11] *Space, Time and Deity*, Vol. II, p. 314.
[12] *ibid.*, Vol. II, p. 311.
[13] *ibid.*, Vol. II, pp. 331-3.

below the realm of man. Furthermore, Alexander does not convincingly show that he means anything more than neural by enjoyment. Sometimes he speaks of the mental process as "something new, a fresh creation, despite the possibility of resolving it into physiological terms." At other times, the mental process and the neural process are one and the same existent.[14] For Alexander, mind and body are *experientially* one thing, not two altogether separate things, because they occupy the same extension and places as a part of the body."[15]

Freedom as the Prerogative of an Emergent Being.—In the notion of creative synthesis E. G. Spaulding finds justification for belief in human freedom. The doctrine applied from man's level down enables Spaulding to account for the continuity of the self. The doctrine applied from man's level up provides him a way to explain the freedom of the self. The continuity of the self is guaranteed upon the principle that constituent parts may come and go, but the organization remains; the latter is more permanent than the residence in it of the material parts.[16] In its relationship to the physical, biological and psychological stages inferior to personality, a permanent, continuous selfhood emerges, which is a new quality and more than the sum of its parts. Freedom of the self is explained by the relations which the self has with entities higher than man. The self is related to esthetic, ethical and theological stages superior to personality as physical. Freedom consists in the fact that each level has its own laws, that is, an individual, who is an ethical being, is free from the exactions of the biological and other lower realms. A person, according to Spaulding, is more than electrons, atoms, molecules and organs, which mechanics, physics, chemistry and biology reveal. He is conscious as well as physical, chemical and biological; he is an ethical, reasoning being. These moral and ra-

[14] *ibid.*, Vol. II, pp. 7, 9.

[15] *ibid.*, Vol. I, p. 107. For a complete critical discussion of Alexander's theory of consciousness, see May Sinclair, *The New Idealism*, pp. 195 *ff.*

[16] See *The New Rationalism*, p. 449.

tional features are as easily revealed by analysis as are the physical and chemical characters of the self.[17]

A word of comment may be pertinent with respect to Spaulding's theory that, though constituent parts of the self may come and go, the organization remains. It seems to the writer that Spaulding, in presenting this notion, is holding to a theory opposed to realistic principles. Does this creatively synthetic organization occur because some directing agency is operating in accord with the discrete parts in consistency with some preestablished harmony? Is the organization the result of an underlying reality with relating power? Or finally, is the organization a fortunate one, but withal one of accident and chance? Spaulding gives us no definite answer to these questions.

The same criticism made against Alexander's theory may be made against Spaulding's notion of freedom. However insistent the new realist may be that there is no causal relationship between the various levels in the emerging universe, he must admit that the higher complexes are dependent upon the lower ones. Spaulding does acknowledge this in saying that the human organism is dependent upon organs, structure and specific processes, and that color and beauty depend upon a perceiving organism.[18] This is to make the self dependent upon things from which as a free and determining being he ought to be independent, and to make him independent of things upon which as a being of value he ought to be dependent. To make values both external to the knowing mind and at the same time temporally

[17] *The New Rationalism*, p. 448.

[18] *ibid.*, p. 500. S. Alexander is more positive than E. G. Spaulding in asserting that higher levels can be interpreted in terms of lower stages. Spaulding's notion of emergence is more significant of the pragmatic motive in evolutionary theory; Alexander's conception suggests more the influence of idealistic thought in cosmological doctrine. For Alexander, "each new type of existence when it emerges is expressible completely or without residue in terms of the lower stage, and therefore indirectly in terms of all lower stages; mind in terms of living process, life in terms of physico-chemical process, sense-quality like color in terms of matter with its movements, matter itself in terms of motion." (*Space, Time and Deity*, Vol. II, p. 67.)

later in the evolution of a rich personality may give them a subsistential status, but it surely does not present them as the efficient, impelling entities which common sense believes, and axiology requires them to be. Spaulding does emphasize the immanency of values, as has been suggested already, but this emphasis is hardly consistent with his theory of emergence, unless he is willing to endow the lower levels with the non-realistic principle of potentiality.

Dynamic Biological Nature as the Ground of Freedom.—R. B. Perry is much more positive than either Alexander or Spaulding in declaring that values are dependent upon the self. "There seems to be no doubt of the fact that things do derive value from their being desired, and possess value in proportion as they are desired. . . . There is nothing so precious that its value would not disappear if all needs, likings, and aspirations were extinguished."[19] In the fact that interests operate Perry finds the meaning of freedom. "I can and do, within limits, act as I will. Action, in other words, is in a measure governed by desires and intentions."[20] This is positive freedom.[21] In discussing "A Behavioristic View of Purpose"[22] Perry interprets the driving interests of man as components of a *set* or *determining tendency*. More fundamental than either instinct as explained by James or McDougall, or complexes as presented by Freud, as a conditioner of response is the general state of the organism which qualifies it and predisposes it to a certain form of action. Recent

[19] *Present Philosophical Tendencies*, p. 333.

[20] *ibid.*, p. 343.

[21] There is also negative freedom, according to Perry. Negative freedom is freedom from the exclusive control of mechanical, social or cosmic moral laws. "There is a sense in which every individual is morally a law unto himself." (See *Present Philosophical Tendencies*, p. 343.) Perry explains this freedom by the notion that a man's action cannot be interpreted fully in terms of the larger purposes which embrace him along with others. In his idea of negative freedom, Perry agrees with Alexander and Spaulding that the self represents a novelty not reducible completely to its conditioning, constituent parts.

[22] *The Journal of Philosophy*, Vol. XVIII, pp. 169 *ff.*

developments in physiology, psychology and psychiatry have emphasized the integration of the organism, rather than the incidence of an external stimulus, as accounting for particular acts. In terms of an organized physiological organism, which behaves like an individual, Perry explains the two aspects of human conduct, the subordination of means to ends and the determination of the future. For Perry, "interested or purposive action is tentative action adopted because anticipatory responses which it [the determining or general response-system] partially arouses coincides with the unfulfilled or implicit phase of such a determining tendency."

Previous quotations from *The Freudian Wish* have indicated that E. B. Holt, like R. B. Perry, explains the teleological aspect of human behavior in terms of the organism acting as an integrated whole. For both, freedom is the character of a biological organism in which natural impulses have full expression. As Holt asserts: "That man is free whose acts fulfil his purposes: this is 'practical freedom,' and such a man has 'the innate sense of being practically free.' The question whence come his purposes is as irrelevant and meaningless as some others that we have seen; whither go the shapes of bursting bubbles? If a purpose is his purpose and if his acts fulfil it, he is free. Now we have seen that the purposes of the knowledge manifold are propositions that actively generate series, precisely as do the laws of nature; volition is therefore as effective, and in the same way effective, as the laws of nature."[23]

If desire is as influential as Perry and Holt aver, it is difficult to understand how analysis can be as objectivistic as the realist claims it to be. The cognitive and affective phases of experience are too closely related for the external object not to be analyzed differently when there are different states of interest and desire.

[23] *The Concept of Consciousness*, pp. 295, 296. In holding that tertiary qualities are the satisfactions and dissatisfactions of three elementary tendencies—the desires to learn, do and produce,—S. Alexander, similarly to Perry and Holt, supports a notion of freedom that is biological in import. (See *Space, Time and Deity*, Vol. II, pp. 243, 244.)

Furthermore, their theory does not give much satisfaction to one who is interested in proving the causal efficiency of the self from an axiological standpoint. They use the term, interest, in a biological rather than a psychological sense. Interests can be accounted for as innate tendencies or instincts, and therefore have little value in supporting an indeterministic view of personality. Like the terms, selection, discrimination, and attention, which occur often in realistic writings to describe the act of neural response, interest must not be interpreted as indicating free, volitional effort on the part of the self. The interest of the self in values is virtually that of the lungs in air, or that of the digestive apparatus in appropriate food. The new realist, in using words with teleological implication, like interest, desire, and volition, to express mechanical activities, is guilty of an error he criticizes in rival theories, namely, the fallacy of verbal suggestion.

We have now finished our survey of new realism as a doctrine with scientific, philosophical and religious import. Some reflection in résumé should be of profit.

III. CONSIDERATIONS IN CONCLUSION

THE purpose of our concluding remarks is two-fold. In the first place, we would present a brief critical review of the new realist's main contentions. Secondly, we would venture to suggest a philosophical theory which embraces the merits of new realism without possessing the standpoint's limitations.

Summary and Appraisal.—Disregarding the individual differences among new realists, their mathematically grounded philosophy espouses the following concepts: *independence in logic; atomism in ontology; emergence in cosmology; immanence in epistemology; behaviorism in psychology; finitude in theology, and optimism in axiology.* In all these disciplines the realistic position, that there are not either facts or values, but both facts and values, is rigorously maintained. In fact, the position, we believe, is too rigorously maintained. As a result of the realist's complete subjection to the externality of relations,

in logic he presents an attractive theory of truth's eternality, but an inadequate conception of its usefulness; in ontology he has a wonderful notion of the independence of values, but no explanation of their immanence; in cosmology he offers a beautiful theory of the world as progressive, but the creativity of the cosmos is left a mysterious miracle; in epistemology he argues admirably for the externality of physical objects, but gets into difficulty when the same type of theory is applied to entities of mind; in psychology he gives an excellent account of the self as factual, but allows little legitimacy to any interpretation of the self as free; in theology, he suggests a very satisfying idea regarding God's being, but a deficient doctrine with respect to his power; and finally, in axiology, the new realist gives us an advancing world without providing us with the very necessary confidence that the goal of the advance is assured.

The shortcomings of new realism seem slight, however, when certain very significant services of the doctrine for philosophy are considered. The contributions are those which cannot be defined in detail. They represent an influence of wide scope—a new motive in reflection—rather than the incorporation of new notions into the body of human knowledge. Foremost among the benefits of new realism is the consciousness, which the doctrine has made prominent in the minds of thinkers of all schools, that philosophy cannot be divorced from science. Its polemic against absolutisms and mysticisms has led the exponents of these types of theory to state their case more clearly, consistently, and concretely. It has not shown speculative philosophy to be unnecessary or false, but it has demonstrated the futility and deception of hasty speculation. In stressing impersonal objectivity to the extreme the new realist has been guilty of logical errors, but his prejudice in favor of externality has served to depreciate the unwarranted traditional appreciation of anthropocentric theories.

Again, the new realist deserves commendation for the assurance he has brought to man that, in spite of the legitimacy of evolutionary doctrine, all in the world is not change. His theory

provides a much needed antidote for the skeptical notions which characterize and even dominate current thinking. The new realist's confidence in the absolute validity of certain logical, mathematical and even ethical truths, restores one's sense of balance in an age when "relativity" is the keynote. The realistic theory of eternal entities is more significant still, as a preventer of skepticism, when it is noted that for the new realist these unchanging realities can be known directly and without modification by human intuition. "To be alive in a world that is not of our own making is after all a noble adventure. And to have the privilege of contemplating existent nature in all its vastness, to feel that each new scientific law is not a mere résumé of our own impressions but a veritable conquest of the objective universe, gives to the realistically emancipated a high and serious elation which is quite beyond reach of those who would subject nature to a status of dependence upon mind. And when to the tumultuous and inexhaustible welter of things existent, realism adds the quite and infinitely greater immensities of the realm of subsistence, the mind gains access to new and imperishable sources of joy and peace."[24] The only draw-back to this enthusiasm for objective realities is the fact, which the new realist himself acknowledges, that the independent entities are not all good and true. The false and the evil are also possessed of veritable being. Until the new realist admits more wholeheartedly into his philosophy the idea of a cosmic principle of goodness and truth which will guarantee the victory of the best, his zeal for contemplation will be more significant of reckless courage than rational consolation.

Finally, the new realist's interpretation of mind and matter as aspects of a third reality represents a philosophy which conforms to the latest developments in natural science. It is an admitted fact that present-day physics and chemistry regard the stuff of the world in terms that are idealistic as well as materialistic in their implications. Neutral monism, or realistic epistemology, is the only contemporary theory of knowledge

[24] W. P. Montague and H. H. Parkhurst, *Mind, N.S.*, Vol. XXX, p. 184.

which recognizes the aspects of both the physical and the psychical without dualistically contradicting the monism necessary to science. In recognizing the claims of natural science, however, the new realist has not given sufficient attention to features of experience which have traditionally been discussed under the names of ego, soul, personality, and so on. Whether or not introspection is to be ruled out of psychology, it cannot be eliminated from philosophy. An epistemology, therefore, which would be philosophical as well as scientific, must study the knower as well as the known. The religious interests of man, with their concern to safeguard human freedom and immortality, will ever rebel against the scientific tendency to interpret man wholly in terms of the laws of physical nature.

The new realist deserves great credit for treating both things and ideals as constituents of the world. He errs, however, we believe, in not bringing the two types of being together in synthetic union. The demand that the normative and the descriptive be apodictically connected is not of course a scientific requirement, but, to the present writer, it is one very important from the standpoint of a theory of reality as a whole. The new realist carries analysis to the point of falsification when he separates mind from matter, values from facts, meaning from existents, universals from particulars. New realism has reason to insist both that values are not reducible to facts and that facts cannot be completely interpreted in terms of values. But new realism's pluralistic position, that there are facts and values, is not the only alternative to the monisms of naturalism and idealism. May not the formal and physical be one? That the material and mental are one without the uniqueness of either feature being lost is the opinion of the present writer. What such an opinion implies is the question immediately considered.

Realistic Idealism.—The standpoint, which we would endorse, is that fact and value are aspects of one and the same reality, and that one aspect, whether particularly or universally taken, is never found without the other. The fact aspect represents the definable feature of an entity, the value aspect its indefinable

character. The indefinability, however, is not due to the fact that analysis has revealed a simple which has only pure being. It is due to the fact that analysis reveals a quality which cannot be interpreted in terms of anything yet examined. Every entity contains a novelty for which we have no predicate, no connotative terms. Therefore, instead of being the neutral simple of realistic theory, it is an ineffable complex large with promise. The ultimates, disclosed by analysis, are characterized both by an existential and a meaning import. The final particulars, reached by analytical procedure, have both intension and extension, and represent both motive and matter. In spite of their deference to purely logical priority, the realists themselves, as has been suggested, have doctrines significant of activity in the ultimates. R. B. Perry's distinction of mind as content and action, E. B. Holt's generating propositions, E. G. Spaulding's organizing relations and S. Alexander's restless Time all suggest simples which have being not devoid of power.

Cut the universe into bits. No part will be mere appearance, depending upon an "other" for its existence and meaning. Every part will be real, factual; every part will also be possessed of meaning and value. As the new realist insists that the being of an entity is not constituted by its relation to other entities, including mind, so the value of an entity is not constituted by its relation to other entities, even mind. This does not mean that things as valued have no relation to a valuer, any more than the realist's neutral entities as known have no relation to a knower. There is, to be sure, a valuing relation, as for instance, the judgment of value, but it is a relation which is not constitutive. Richness of individuality may be enhanced by many relationships, but every individual possesses value in and for itself alone. Without some such basic supposition a social or religious philosophy which would be fair both to the uniqueness of God and the rights of man is impossible, and the derivation of the complex, meaningful world from simple elements entirely unintelligible.

The presence of value, as well as being in things, makes neces-

sary the requirement that philosophy, as axiology, should employ ideal standards. Value represents the active, dynamic, striving, advancing features of reality. It represents the tendency which all entities possess to advance to more complex and significant types. The world is composed of numberless individuals, tiny absolutes, but these ultimate centers of being and value are not self-enclosed or totally discrete from all other things of the world. Every simple, as fact, is externally related to everything else. The internal relationship occurs, not because relations are constitutive of the value aspect, but because it is the nature of entities, as value possessing, to effect relations. The value of an entity consists in the fact that it tends towards relations with other entities. When a relationship between entities is achieved the value of the complex does not lie in the relationship attained, but in the propensity to effect still further relationships.

Values represent a cosmical motive, a universal meaning, dynamic and prospective in every item of reality. From the standpoint of science the world is pluralistic and purposeless, but from the point of view of axiology it is singularistic and spiritual. The new realist is right in declaring that the essence of factuality is found in the parts, and the idealist is right in contending that the essence of meaning is found in the whole, or in that feature of the part which is indicative of the whole. Idealism is interested chiefly in ideality; realism is interested primarily in actuality. The two concepts, as Aristotle long ago taught, are not incompatible, but supplementary. Ideality, the straining of the parts of reality after universal meaning, in short, the value aspect, is our answer to the question of causality. Actuality, the particular existences, the parts of reality in which value is lodged, in short, the fact aspect, is our solution of the problem of substance. The speculative dogma and the scientific dogma are not fallacious when applied to the legitimate fields. They are errors only when they also become the fallacies of exclusive particularity.

The existential is experienced by us in the form of percepts

or constructs built upon percepts. Percepts and concepts are not false to reality, as Bergson believes. The ultimates of the world have an aspect of permanence, and the cognitive features of consciousness, in being relatively static, are indicative of the nature of that in the world which is immutable. The axiological is experienced by us, on the other hand, in the form of ideals and aspirations. The feelings here play an important, though not an exclusive rôle in revealing something regarding the character of the world. Values are the data of ardent, affective religion, as facts constitute the subject matter of cold, cognitional science.

Science has the advantage of religion in that it can interpret reality as actual in terms of antecedent conditions subject to examination. Religion, concerned with reality as potential rather than actual, can only interpret reality in terms of consequents that are unrealized, unobservable, ideal. Philosophically, there is as much legitimacy in a religious interpretation as in a scientific one. Religion emphasizes the future interests, science the interests of the past. Philosophy, when it is purely theoretical and not humanistically practical, should be indifferent to matters of time. For logically it may be as justifiable to hold that the future affects the present or past, as to maintain that the past or present influences the future.[25]

The inclination to define values in terms of biology, psychology or sociology, that is, in terms of science and on the basis of the actual, is an evidence of man's practical, utilitarian interests. The disposition to explain values in terms of faith, hope, or aspiration, that is, in terms of religion and on the basis of the ideal, is significant of the speculative, romanticistic element in human nature. The tendency to interpret values in terms of of both science and religion represents the philosophical motive in man. A philosophy which recognizes reality and its ultimate constituents as having both existential and axiological import, as having, in other words, permanent or actual, and progressive or ideal characters, finds no difficulty in incorporating into its standpoint the positions of both science and religion.

[25] See A. E. Taylor, *Elements of Metaphysics*, p. 166.

The most familiar feature of experience, which represents adequately the notion that value and facts are two aspects of the same being, is personality. Here we find a factual, particular existent in which normative, universal subsistents are actively immanent. It is in terms of personality that the world as a whole should be interpreted.[26] The individuality and progress of the cosmos seem unintelligible unless there is a purposive, synthesizing principle in reality. Reality, in short, as F. H. Bradley argues throughout his *Appearance and Reality*, must be that in which the Absolute as One Experience, self-pervading and superior to mere relations, is positively present. The theory that ideality and actuality, value and fact, are compatibly conjoined in the things of the world is affirmed by A. Seth Pringle-Pattison in these words: "It is the nature of the infinite to express itself in the finite; and the living fact is just this unity—the realization of the infinite and the recognition by the finite of its groundedness in the infinite."[27] The standpoint is essentially that of J. A. Leighton who, throughout his work on *Man and the Cosmos* seeks to show that the physical, vital and human orders, although existentially distinct from God are "the continuous expression of his creative energizing will."

Two great theories are at war in the field of philosophy today. On one side idealism is drawn up; on the other side realism is arrayed. "The great merit of idealism is that it really has tried to do justice to the social, ethical, esthetic, and religious facts of the world. The great merit of realism is that it really has tried to face in a patient and detailed way the problem of matter and our perception of it. But neither of these activities is a substitute for the other, and a genuine speculative philosophy must combine a detailed study of the lower categories with the due recognition of the higher categories, and must try to reconcile the pervasiveness of the former with the apparently growing

[26] E. S. Brightman, R. T. Flewelling and A. C. Knudson, contemporary exponents of B. P. Bowne's *personalism*, vigorously defend the priority of personality.

[27] *The Idea of God in the Light of Recent Philosophy*, p. 251.

importance of the latter."[28] Promises of this desired reconciliation are commencing to appear. The idealist, cosmologically and psychologically subjective, is beginning to attack the ontological and epistemological problems from the standpoint of objectivity. The realist, objective in ontology and epistemology, is becoming subjective in his doctrines of cosmology and psychology. Philosophy itself is the scene of the dialectic process, and the synthetic system, which was asserted in the first part of this essay to be the goal of philosophical activity, is slowly but surely reaching realization. The speculative dogma, with its ideal of the many in the one, persistently remains.

[28] C. D. Broad, *Contemporary British Philosophy*, first series, p. 99.

APPENDIX

APPENDIX

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